DOCTORAL THESIS

Policy Tectonics

Theory and Enactment Around the Model for UNESCO Global Geoparks

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Policy Tectonics: Theory and Enactment Around the Model for UNESCO Global Geoparks

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ABSTRACT

This thesis presents an ethnographic examination of a discrete convergence between geology and society. It is communicated through the geoparks model that has shaped a policy of sustainable territorial development, as grown out of a motivation seeking to promote wider awareness and engagement with issues of geological heritage, conservation and sustainable development. The research is devised by way of an adaptive set of methods, bringing data from the field as experienced in rocky outcrops across case study geopark sites, at the formal dissemination of the approach in geopark network conferences, and by informal internet access to a dispersed online community of geoparkians. In so doing I seek to open a window looking out on one perspective of anthropology in the Anthropocene.

The research follows the flow of geoparks policy as guided and shaped by a defining charter and statutes, which after nearly two decades of lobbying and promotion have now become an official programme with the United Nations Education Science and Culture Organisation (UNESCO). By utilising an anthropological examination of geoparks policy, rather than blandly accepting an essentialised view that aspires to be passed from site to site around the globe as the programme expands, this thesis provides a critical assessment of previously taken for granted terms and mobilizing metaphors. It explores the underpinning philosophy of geology that has impacted upon the forms and direction in which the geoparks are being developed. It evaluates the function and application of a form of audit culture that seeks to ensure accountability and progression as the model is expanded into new territories, and considers how a more singular pure vision of

geoparks is being balanced with multiple and often complex enactments, as seen notably through the analysis of how three case study sites; English Riviera Geopark (UK), Katla Geopark (Iceland), and Marble Arch Caves Geopark (UK and Ireland) are practiced on the ground.

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ACKNOWLEDGEMENTS

I'm a rambling man, always have been – and without doubt this thesis represents my longest and most arduous journey. In my mind whilst writing up, I treated this thesis as my ascent of Qomolangma step by breathless step up to top of the world. To find my way safely home I've had to draw upon a dizzying array on discussions, perspectives, guidance, support, kindness, hospitality, laughs and love. Although I get my name in lights on the front cover, as in all Himalayan ascents it has most certainly been a team effort. I therefore must acknowledge some individual roles, but mostly the collective contribution that has seen me over the line.

I'll begin at the beginning and the first voice to encourage me to create a piece of PhD research came from Tom Selwyn. Thank you Tom for showing and sharing that initial belief that I was capable of something of this magnitude. To succeed though, I had to choose a subject matter that was very close to my heart and to which I thought I'd be able to contribute something. That subject - where geology, anthropology, heritage, tourism and development converge - I first encountered thanks to an inspiring talk by Patrick McKeever. Patrick then subsequently invited me to and shared a corner of his Ireland with me and I first experienced how a geopark was manifested with him in Marble Arch. Many thanks Patrick for pointing me on to this pathway, and to Donard for the first friendly geopark woof. That initial meeting wouldn't have

happened if it were not for Ross Dowling's initiative to stage the first international conference on geotourism in Fremantle. Ross you are a wonderful gust of optimistic energy. Thanks for all of your initiatives, conversations and consistent positivity. Through Ross, I also got to know Alireza and Ng Young – thank you guys for always being clear with your thoughts and ideas. Also for both of you showing how to put theory into practice with your groundwork across Iran and Hong Kong geoparks. I salute you.

I made my initial start as a PhD student whilst still at London Metropolitan University. There I over ambitiously tried to juggle a full-time job with part-time research. However, out of this I had the opportunity to conduct a considerable amount of fieldwork and grappled with the conceptual groundings of this ethnography thanks to input and support from my first supervision team. I'd therefore like to offer a big embrace to Julie Scott, who showed immense patience waiting for me to write! But instead I spluttered and flopped like one of those early efforts by humankind to generate powered flight. Thanks to Julie for showing me the basic tools to conduct a meaningful ethnographic study and for being a great analyst of my fuzzy early thoughts. Thank you too to Nelson Graburn for walking and talking out in the field, and sharing your enthusiasm for cultural and natural landscapes converging.

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Eyjafjallajökull, the most impacting and long-lasting links were made with the 'volcano refugees' stranded in tropical Malaysia. To that group I would like to thank in particular: Melanie, Nick, Chris, Pål, Sara, Vesa, Wesley and Henning. Since those days in Langkawi I have always received warm welcomes and rich conversations. As a fellow volcano refugee I also had an initial opportunity to talk at length with the inspirational Guy Martini. Since then I have subsequently had many enjoyable and insightful discussions. Thank you Guy for your passion, for continuing to bring fresh ideas to the table, and for always imagining different possibilities to invigorate the geoparks approach. Also I extend my great thanks to Prof. Ibrahim Komoo for providing a different motivational and innovative perspective though our periodic, but always warm and stimulating discussions.

In my case study geoparks I owe a particular gratitude for the patience, hospitality and good will shown at all times in the English Riviera, Marble Arch and in Katla. Thank you especially to Melanie, Nick, Kirstin, Richard, Helen, Martina, Steingerður, Brynja and Sigurður. From initially brief contacts at geopark events, Facebook allowed some rapid encounters to extend into much richer connections. Notable amongst these have been the numerous exchanges of thoughts and images shared by Sachiko, Hiroyuki, and Setsuya – thank you for helping continue the field online and brining longitudinal experiences with your postings.

The fieldwork is often the glamorous part of ethnography, with travel and intensive experiences, but making a thesis happen is as much to do with the work and support at home. Friends and colleagues play a huge part in ensuring opportunities can be taken and that time and space can be provided to allow research and writing to happen. So thank you friends for bearing with me. Suffering through my moments of angst and for pushing me forwards and providing a number of strategies to tame my tendency to procrastinate and get distracted!! Cheers Raoul, John Bell, Giley, Silvia, Ian Selby, Med Voicers (Meg and Rachel), and Breandán. But biggest thanks in this category, to Mark and Faith – opening your home and sharing your hearts at my most needy writing time you were there : I love you guys.

But academically and professionally I could not have arrived at this point without the truly amazing contribution of my supervision team at Roehampton. Garry for bringing your calm and experience in having steered many PhD ships safely around the rocks and reefs of university bureaucracy and systems, thank you. Jonathan sensei, you are my mentor and inspirational strategist. What an amazing skill and knowledge you have. You are a truly brilliant supervisor, knowing how to get the best out of me is some achievement! Bringing a combination of stick and carrot, but never appearing too harsh or too easy going. What a breadth and depth of knowledge you have brought into my work. Always suggesting an appropriate link and stretching my awareness of anthropology and the philosophies that move around the subject, far

beyond the boundaries I thought I would reach. I really feel I have grown around your guidance, thank you so much.

My family however, is owed the biggest gratitude. They were the ones who tolerated my many moments of doubt and frustration on a daily basis. Mum and Dad thank you so much for bringing geology into my life and for supporting and valuing my education at every step – love you. Eva and Wilfred you are amazing people and for your patience, tolerance, love and care, now I've finished this epic I want to give doubly back to you. The last word has to be for Tracy though. My rock. Rising to the immense challenge of supporting all of us through three simultaneous jobs – whilst at the same time generating enough warmth and compassion to lift me and provide that extra drive to overcome those periods of inertia. I thank you for your unwavering belief in me and for conjuring away my demons - I love you Tracy, this thesis is for our whole family.

ETHICAL APPROVAL

The research for this project was submitted for ethics consideration under the reference **LSC 15/ 137** in the Department of Life Sciences and was approved under the procedures of the University of Roehampton's Ethics Committee on 13th July 2015.

LIST OF FIGURES

All photographs taken by Jonathan Karkut unless otherwise indicated.

LIST OF ABBREVIATIONS

AC – Advisory Committee
ANT – Actor Network Theory
AONB – Area of Outstanding Natural Beauty
CC - Coordination Committee
EGN – European Geoparks Network
ERGO – English Riviera Geopark Organisation
ERTB – English Riviera Tourism Board
ERTC – English Riviera Tourism Company
GGN – Global Geoparks Network
GSA – Geological Society of America
GSI – Geological Survey of Ireland
GSNI – Geological Survey of Northern Ireland
IPA – Instrument of Pre-Assession
IUCN – International Union for Conservation of Nature
IUGS – International Union of Geological Sciences
MAC – Marble Arch Caves
SSSI – Site of Specific Scientific Interest
STS – Science Technology and Society
TCCT – Torbay Coast and Countryside Trust
UNESCO – United Nations Education, Science and Culture Organisation

Chapter 1 – A story captured in stone - introducing the geoparks model

1.1 - Introduction

It seems to have taken the arrival of the earth-shattering concept of a new era in geological time shaped by the advent of homo sapiens as a geological agent (Clark, 2014), the 'Anthropocene' (Crutzen, 2002; Waters et al., 2016), to have stirred an interest from anthropology and the social sciences into the realisation they do share some profound common grounds with the Earth Sciences (Clark, 2014; Latour, 2014; Haraway et al., 2016; Latour, 2007). The production of this newly realised relationship ensures,

'what we hear today is no longer Galileo's protestation that "eppur se muove" "yet it moves", but something much more scandalous for all the ears of Earth's inhabitants: "yet it is moved" — that is, it has a behavior, it is a source of movement, emotions, effects and affects. It's no longer indifferent to our own movements. Going from a stable Earth that is décor of human history, to an Earth active on the stage of a common drama'. (Latour, 2016: 1)

During this period of awakening to the connections in the Anthropocene, a rather more discrete motion directing geology and society on a closer trajectory was also emerging through the actions of a group of European geologists. Their motivation was to push for a greater understanding of Earth Science to a wider public, and encourage the use of geology as a driver for sustainable development (Martini, 2000). At the heart of this new model termed a 'geopark' (Martini and Zouros,

2001) were the concepts of recognising and conserving geological heritage, and utilising geological resources to support local economic development (Martini, 2000).

This thesis intercepts the model of the geopark at a point where it has grown in a little under two decades, from a gang of four European territories that coalesced in to a network having previously been discretely following similar aims but alone (Martini and Zouros, 2001) into a global programme recognised by United Nations, Educational, Scientific and Cultural Organisation (UNESCO), and which as of summer 2017 encompasses 127 geoparks in 35 countries (GGN, 2017). Combined policies to support and achieve 'sustainable territorial development' (Martini, 2000: 155) became a fundamental component of the geoparks approach.

It is in following the flow of geoparks policy from theoretical stance visualised initially in a guiding charter (Frey et al., 2001a) to practical realisation in multiple locations, that I consider anthropology can offer critical insights, and why the pursuit of these flows forms the primary focus of my research. As a distinct corner of interest, it is only in the last decade or so that a more widespread response to Laura Nader's earlier call for anthropology to 'study up' (Nader, 1972), has been acted upon in diverse ethnographic studies (cf. Clarke et al., 2015; Gatt, 2013; Law and Singleton, 2014; Müller, 2011; Shore, 2012; Wedel, 2011). There are two areas in particular where the approach taken by an anthropological perspective of policy, can offer a distinct analysis of the geoparks paradigm. Firstly it is in the critical assessment of policy as an object (Wedel and Feldman, 2005) not as an essentialised or taken for granted package to be duplicated and transmitted with

scant recognition of the context where that policy moves next (Shore and Wright, 2011). Secondly 'Anthropology is ideally suited to explore the cultural and philosophical underpinnings of policy – its enabling discourses, mobilizing metaphors and underlying ideologies and uses' (Wedel and Feldman, 2005: 2).

For geoparks I believe the distinct practices of geology in the field, as a historical science where narratives and earth stories relevant to particular events and locations (Frodeman, 2014), have a profound influence on the process of shaping the model. This comes not just in the framing of statutes and guidelines, but in the ways that the model is practiced. In this thesis I am therefore also seeking to test in the field through case studies and ethnographic participant observation, how a philosophy of geology may be recognised and demonstrate its influence, not least in terms of underpinning how policy issues are framed and responded to. But I have a vested interest in this combination of anthropology, geology, policy and philosophy, in the new Anthropocene era. I'd like to frame this by offering a biographical introduction to myself as researcher and ethnographer. This I hope will clarify how I arrived at the subject of policy and practice around geoparks as a form of halfway meeting between two careers, disciplines and passions that have been present in my life long before I undertook this PhD research.

1.2 - My narrative first as a rock hound, then eventually an ethnographer

'If fieldwork is a personal adventure and belongs between autobiography and anthropology, it implies that the ethnographer is a person with a distinct biography'. (Hastrup, 1992: 118)

At this moment I think it useful to introduce my distinct biographical gateway to this research. Indicating through that personal background where a closing of the divide between the 'subject' (investigating ethnographer) and the 'object' (investigated community) has occurred and how I came 'to be in that particular place studying that group' (Abu-Lughod, 1991). Here are some of the personal circumstances, experiences and influences that have brought me to choose the geoparks network as my mobile and fluid fieldwork 'site', and the gathering around social and Earth Sciences as the conceptual setting.

In 1972 my mother signed up for a Workers' Education Association (WEA) (https://www.wea.org.uk) course in geology, organised by the University of Nottingham geology department. As with many a geology course, an integral and certainly the most popularising component, was getting out into the field and reading the landscape (Frodeman, 1995). So popular were the WEA field trips that they were opened out to allow the families of those attending the course to come along on the one weekend a month trips. A great many of those trips were into the glorious landscapes of the nearby Derbyshire Peak District. Fossil hunts in the carboniferous corals, hammering for galena ore or blue john fluorspar like 't'owd man' (Shaw, 1980), and most memorably of all donning a hard hat for the first time to follow world renowned speleologist Dr Tony Waltham into subterranean limestone worlds. Not surprisingly, it didn't take much persuasion to have me hooked on where or in which geological age the next earth story would take me. Through those initial WEA connections, the next step I can see in hindsight was my earliest introduction to geological heritage. My parents both joined a weekend

voluntary force, organised by the Peak District Mines Historical Society (http://sf.pdmhs.com), contributing to restore a disused mine shaft and bring back to life some of the lead mining artefacts. When geology animated my childhood in this way, I didn't even consider I had a choice to make when it came to selecting a path of study and profession. My route into a world geo-logic (Frodeman, 2003) was constructed then and there.

A further piece of this thesis assemblage, was inserted when during my first year of undergraduate study, I took a module on social anthropology as one of the options for the science degree scheme that eventually took me to a geology degree. During that course, which sparked an interest that I would later return to, my anthropology lecturer spoke at greatest length about her thesis on the Bemba of the copper belt. In a peculiar note of serendipity some forty years earlier my father spent what he described as some of the happiest moments of his childhood as a refugee from war torn eastern Europe, in a camp located amongst the Bemba then of British Northern Rhodesia now Zambia, and organised by Polish missionary priests. So too my family biography had enacted some early intersections with materially heterogeneous worlds (Law and Urry, 2004) a theme that as observed in the geopark locations, will be highlighted later in the thesis.

On graduating, I built up experience as a practicing geologist working in a range of environments. I first joined the coastal geology unit at British Geological Survey in my hometown of Nottingham, then acted as a field exploration geologist in rural Queensland looking for gold, and as an assistant mine geologist in Western Australia following the gold seams underground in a working mine. Returning

back to Europe, I then travelled offshore around the British coast to work a couple of seasons conducting marine geophysics looking for gravel resources to dredge. What I wish to introduce in this narrative, is that I was immersed in a geo-logic (Frodeman, 2003) world thinking and working as a geologist, volunteering amongst enthusiastic amateurs on a geoheritage venture, heading underground or offshore with concepts of deep time (McPhee, 1981) an everyday experience rather than an abstract notion.

Set within that background I came back to the social sciences more substantively in 1994, to study a Masters in the anthropology and sociology of travel and tourism. But as I hope it is conveyed above, geology had been more than an academic subject for me. It was with open arms that I therefore embraced the opportunity to blend two careers, and two segments of my life together in this ethnographic research that brings a closer examination of the geoparks model. I certainly identify with the recognition of a 'halfie' status (Abu-Lughod, 1991), though in respect to this ethnography, I am speaking of interest groups rather than ethnicities.

1.3 - Founding moves of the geopark concept

The eventual formulation of the European geoparks network in 2000, only came after near to a decade of discussions, meetings and examination as to how the considerations of geological heritage, its conservation and wider popularisation may best be structured (Frey et al., 2001b). This section based mainly around

documentary evidence, traces the meetings and motivations that help to bring an understanding of the setting from which the geoparks model originally emerged.

The European Working Group on Earth Science Conservation (EWGESC), which existed from 1988-1993 before restructuring in 1993 to become the European Association for the Conservation of the Geological Heritage (ProGEO), arose as a prominent voice in the debate to find an equal platform for concerns regarding the conservation of this geological heritage and awareness of geodiversity more widely (ProGEO, 2016). The emergence of ProGEO was set against a backdrop where the legal frameworks to protect geological heritage had been developed in a somewhat piecemeal manner(Prosser, 2008). They were often placed in isolation and not integrated with the more prominent and nationally overarching legislations covering conservation of the natural environment. The physical consequence of this was the creation of scattered, diverse and smaller geological reserves within or around the more substantive boundaries of national protected areas (Dingwall, 2000).

The first milestone from within the ProGEO grouping, came with the staging of the '1st International Symposium on Conservation of Our Geological Heritage' that took place at Reserve Geologique De Haute Provence, Digne-les-Bains (France) in June 1991. That event had already managed to attract the patronage of the United Nations, Educational, Scientific and Cultural Organisation (UNESCO) Division of Earth Sciences and this was to prove to be just the starting point in a lasting relationship with what eventually emerged as the geoparks model. The key outcome from the event was the creation of the nine point 'Digne Declaration of

the rights of the memory of the Earth' (ProGEO, 2016). This is considered by some to be the philosophical starting point for the Geoparks movement (Jones, 2008; Martini, 1994) as it was the first internationally organized gesture to make a statement regarding the identification and conservation of geological heritage means to protect and promote geological heritage (Cleal et al., 1999). It is worth noting that the driving force behind the Digne declaration and linked conferences was an association drawn from academics and professional earth scientists, rather than a governmental or inter-governmental organisation. Consequently, the auditing of geoheritage and the formation of geological reserves, placed an overriding consideration on scientific and educational merits (Martini, 2000). The outcome of such prioritisation was 'the creation of small, scattered reserves as key reference sites, "museum" pieces and monuments, with their management often subject to strict rules relating to access and use' (Dingwall, 2000: 18). In other words, geological conservation at this time, was being accused of becoming isolated from other heritage and generated by geologists with geologists in mind, not the wider public.

The momentum channelled through the Digne event, and the subsequent declaration, was maintained through an emphasis on striving for the establishment of international guidelines and standards for geo-conservation (Bowen and Ellis, 1996). The debates and meetings also attracted an institutional engagement from the International Union of Geological Sciences (IUGS), the International Union for Conservation of Nature (IUCN), as well as UNESCO Division of Earth Sciences (Burek and Prosser, 2008). With the new focus on achieving worldwide rather than just local recognition for geo-conservation, and with the attendance and input

from the core international conservation agencies, it was probably an obvious outcome that subsequent efforts tended to hone in on enhancing a geological function within existing conservation programmes. On a more philosophical note that is expanded upon further in this introduction, it is worth mentioning that the emphasis around conservation efforts, highlights how 'Earth scientists commonly combine their fascination with epistemological puzzles with serious ethical and political concerns. Typically individuals with a profound feeling for nature…they often champion conservationist and/or preservationist stances toward the natural world'. (Frodeman, 2003: 15)

It is widely reported (Alexandrowicz and Alexandrowicz, 2004; Eder and Patzak, 2004; Frey et al., 2001b; Jones, 2008; Komoo and Patzak, 2008) that the most important milestone for the creation of geoparks came on the occasion of the 30th International Geological Congress at Beijing in August 1996, or more specifically around the workshop of the 'Expert meeting on geological and fossil sites'. The aforementioned international institutions were all represented along with many other interested parties concerning the theme of the conservation of geological heritage. Amongst those present, was French geologist, Guy Martini, whose base of work at the Reserve Geologique De Haute Provence, was complemented through membership of both the Malvern Task Force and ProGeo (UNESCO, 1996). Within the forum, Martini happened to converse with another colleague, Nickolas Zouros, a Greek geologist who, since 1995 had been the Director of the newly created Natural History Museum of the Lesvos Petrified Forest (Zouros, 2004). Until that moment, as highlighted in the subsequent report back on the workshop from UNESCO earth sciences division (UNESCO, 1996), there had been no shortage of

scientific meetings, exchange and strategy to promote awareness of geological heritage and efforts to ensure its conservation. However, Martini and Zouros outlined that despite these numerous actions, they shared a common frustration in the difficulties encountered in sharing this geological information with the 'wider general public' (Frey et al., 2001). As an outcome of that discussion, the two decided to go in search of other like-minded individuals and geological heritage sites or reserves. Initially limited to collaborations in Europe, the motivation was to work towards establishing a network of locations where they shared similar ideals of not only listing and conserving geological heritage, but promoting and communicating earth science knowledge to a wider public (Frey et al., 2001).

With a background and experience already stretching back over a decade, of supporting the Reserve Geologique de Haute Province through regional European Union funds and programmes, the logical pathway was to look again for further funding support from similar programmes. To some extent the European Union regional policy consequently steered, or at least overlapped with the direction and objectives of the nascent geoparks model. Rather than individual, isolated localities, such programmes demand collaborative groupings or consortia (Lewis and Mosse, 2006a). The emphasis was also on the engagement of regions with certain common conditions, including rural depopulation and brain drain of youth through depressed and undiversified local economies (Martini, 2000). But what it did possess was world-class geological resources, in particular paleontological finds, and a favourable location equidistant to the significant metropolitan centres of Marseille and Nice. The combination of those factors and the background debate that had come to a head at the 1996 Beijing International Geological Congress, and

the conclusion was that sustainable tourism development with an entry point around the geological offer could provide a pathway to support the dual goals of geoconservation and economic development. The theme of geotourism (Hose, 1996; Hose, 2012; Dowling and Newsome, 2010) was thus identified.

A considerable body of debate has subsequently circulated around the geoparks network in search of finding a suitable definition for the term, and to present cases of geotourism activity drawn from the global geoparks network (Dowling, 2011; Farsani et al., 2012; Martini et al., 2012; Mc Keever et al., 2006; Newsome and Dowling, 2010). In terms of assessment of impacts and the positioning of geotourism within a local context, those responses that were written up are seen to be based strongly around numerical and economic prerogatives (Härtling and Meier, 2010; Fassoulas and Skoula, 2006). Conspicuously however, there has been a restricted engagement in connecting ideas of geotourism into the wider literature regarding tourism's roles and challenges in development or sustainability (Ateljevic et al., 2007; Bianchi, 2009; Bramwell, 2006; Harrison, 2001; Urry, 1992; Hall, 2000). Equally, in terms of academic or technical debate, there appears to be a lack of recognition concerning the separation that occurs between theoretical or policy outlines and practices on the ground (cf. Brooks, 2012; Hall, 2000; Jóhannesson and Huijbens, 2010; Robinson and Picard, 2006; Meethan, 2001; Tribe, 2006; Hannam, 2002; Urry and Larsen, 2011). This research notes this, as one of several 'taken for granted' positions (Wedel et al., 2005) regarding important concepts as identified in the strategy and policy directions taken by the geoparks networks and organisation. The implications of such 'blackboxing' (Latour, 1999b) shall be considered further through this thesis.

1.4 - Four pioneer territories and a bridge to UNESCO

Returning to the sequence of issues and responses that brought about the creation of the geoparks network, the next task if funding was to be secured and the concept transmitted was the drawing together of a consortia of equivalent locations in other European regions. With the meeting between Martini and Zouros one further region was rapidly identified. That was the Island of Lesbos, Greece where the Natural History Museum of the Lesvos Petrified Forest was located. The museum as well as presenting the geological stories on the island, had additionally worked to integrate itself within the island's economic structures, and made a natural partner alongside Haute Provence. Two further localities in Maestragzo Teruel, Spain and Gerolstein, Germany (later to be known as Vulkaneifel Geopark) completed the partnership of four areas which would come together with the support of the European Union LEADER-IIC programme to organise a transnational cooperation 'Project Development of Geotourism in Europe' (Alexandrowicz and Alexandrowicz, 2004). The LEADER-IIC project progressed to generate, coordinate and bring geotourism to the four territories of the partnership, with those partners becoming the first European 'geoparks' (Eder and Patzak, 2004).

The term 'geopark' was first shared with a wider public during the next ProGeo conference in Bulgaria during 1998 (Alexandrowicz and Alexandrowicz, 2004). On that occasion, Margaret Patzak and Wolfgang Eder of the earth sciences division in UNESCO outlined the concept of geoparks as a new UNESCO label (Patzak and

Eder, 1998). This commitment was the starting point of an intensive effort over a number of years to evolve and promote the geoparks concept within UNESCO structures, the impact of which was to strongly shape the direction of the geoparks model for the following decade (UNESCO, 1999). In addition to moving through the internal processes within UNESCO of committees, executive boards and general assemblies (UNESCO, 1999; UNESCO, 2000; UNESCO, 2001), the four pioneering geopark organisations assessed the features of existing international heritage and conservation tools, in particular those functioning under UNESCO.

One significant decision arrived at by the emergent geopark network committee, was the target of maintaining the quality standards at each territory as set out by the dossier they submit when joining the network and synthesised in the EGN charter (UNESCO interview, 2009). It was expressed to me during informal discussions with members of the EGN advisory committee, that particularly when observing sites in the World Heritage listing, some concerns were raised with regards to the responsiveness of a site when it had veered away from the conditions as described in its original application. UNESCO had embedded within the 1972 World Heritage Convention, two articles which outlined that if the conditions or circumstances around a site had shifted to threaten the universal qualities and criteria for which it was selected, then it could be placed on World Heritage in Danger list (UNESCO, 2015). However, just a brief look at the in danger list shows how sites can remain for literally decades without being delisted. For instance the Simien National Park in Ethiopia was first flagged up in 1996 and only came off the list in 2017, whilst the Chan Chan Archaeological Zone or Peru has been 'in danger' but still on the World Heritage List since 1986 (UNESCO World

Heritage Centre, 2017). Furthermore, the world heritage model was considered to be driven by conservation priorities. Geoparks on the other hand sought to engage as much in territorial development as in issues of heritage recognition and conservation (UNESCO interview, 2009).

The highly politicised process around the inscription of world heritage (cf. Harrison and Hitchcock, 2005; Logan, 2012; Meskell, 2015; Müller, 2013; Bertacchini et al., 2016) brings into focus a range of issues from the political and socio-economic to nation building exercises (Meskell, 2014). At the centre of the process the World Heritage Centre (WHC) was initially established as a facilitating intermediary agency involved in technical and normative practices (Müller, 2013). But as the relationships between the WHC, advisory bodies and state parties have become more complex,

'many observers argue that state agendas now eclipse substantive discussions of the merits of site nominations in tandem with issues raised over community benefits, the participation of indigenous stakeholders, or threats from mining, exploitation or infrastructural development'. (Meskell, 2015: 9)

It was in part on reflecting upon the somewhat messy circumstances around world heritage (UNESCO interview, 2009)that the geoparks network chose to implement a more rigorous approach of peer reviewed assessment to check and ensure a geopark site was effecting its conservation, development and management commitments as originally described in its application dossier (EGN, 2017a).

Individual geoparks can interpret and enact the geopark policy in their own distinctive ways. Their presence and membership within the geoparks network, being tied to a four year cycle, at the end of which the performance of the geopark is assessed in a two-part revalidation process. First the geopark coordination staff are obliged to complete an extensive 'self-evaluation' form. The forms are framed around mostly numerical responses with pre-assigned weighted values, that are the answers to set questions grouped within thematic sheets, such as 'geology and landscape', 'management', 'geotourism' (EGN, 2017a). Those forms are sent to a team of two experts (who are generally internal to the GGN as existing or former geopark staff who are required to have experienced at least one revalidation at their 'home' geopark) delegated by the GGN and UNESCO Bureau, who then conduct a 3-4 day field evaluation as guided around the geopark by the hosting coordination team. Following that visit the expert evaluator complete their scores in a parallel column next to those submitted in the 'self-evaluation', along with a progress report in a separate set of forms. The missions are informed by an eight page set of guidelines, and 'to ensure full transparency and accountability of the entire process, each evaluator is required to submit their CV, detailing their relevant experience' (GGN, 2013). The impact of the evaluation/revalidation process recurs throughout this research and is considered particularly as it is practiced in the 3 case study territories.

A card system was subsequently integrated, that has been inspired by some field sports. If an evaluation is passed, then the geopark is given a green card. If it fails in any of the sections, then it is given a yellow card. In this circumstance, the geopark has a further two years to demonstrate ‘satisfactory progress’. At which point it is

re-assessed. If this time it has shown an improvement, then it can be given the green card and allowed membership of the EGN for a further four years. If however, no satisfactory progress is observed, then the geopark is given a red card and excluded from the network (GGN, 2013). Unlike in field sports however, a territory can get a reprieve by working through another full application process, which is approved allows the geopark re-entry into the network (EGN, 2017a). The process has now been practiced and tested over hundreds of times worldwide, resulting in some geopark locations departing the geoparks network permanently. Whilst other sites have regrouped and responded to further evaluation missions be gaining a green card and returning back to the network having previously been dismissed with a red card (UNESCO interview, 2009; UNESCO interview, 2014).

1.5 - Expanding into a Europe wide concept

Having already secured European Union rural development funding, the group of four nascent geoparks had the capacity to generate a range of geotourism products, routes and itineraries, educational materials and a common website (Frey et al., 2001b). With interest in geotourism and geoparks gathering attention, the ambition was to sustain and build beyond the core. This would be achieved through active cooperation and a desire to identify and exchange notes on the variety of solutions each partner found when tackling the common concern of finding a sustainable route to developing landscapes and their resources (EGN Magazine 2001).

There was also recognition that the geoparks approach could take up a more prominent position mediating between the earth sciences and wider society on matters of geoheritage, geo-conservation and geotourism (Barettino et al., 2000). This would be covering new terrain for many geoscientists, since geology entered as one of the younger sciences having only established its own disciplinary boundaries in the early 19th Century (Baker, 1998; Gould, 1987; Frodeman, 1995). For much of the intervening two hundred years, it has set a principal aim on establishing its credentials within the key 'hard science' communities, and overlooking its own distinctive credentials (Frodeman, 1995). That stance is still repeated to the present day, and in particular 'this deference may be expressed in a fetish for quantification' (Gould, 1987: 97). A telling note for instance when one considers how geopark evaluation forms are constructed, or how geotourism impacts are measured.

The timing of the geoparks initiative struck at a moment when additional profound discussions were emerging that have suggested a distinct philosophy of geology may fit the manner in which the discipline engages with broader societal and environmental concerns (Baker, 2013; Cleland, 2001; Frodeman, 2003). As introduced at the beginning of this chapter, the concept of the Anthropocene has brought about a dramatic re-evaluation of positions. Consequently, 'Both natural and cultural forces are changing the role of the Earth/environmental sciences in society, forcing the discipline to take on political responsibilities markedly different from those of its own earlier history' (Frodeman, 2003: 15). In part this thesis is responding to that philosophical platform. However, a sense of how

significant a challenge was being taken by those adopting the geopark model, was presented at the time by Martini (2000: 155), who warned that

'We [geologists] must all learn to work with the other players in the territory (development agents, politicians, town planners, heads of enterprise). We cannot continue to work alone on the scale of one site; we must think in terms of whole areas that are coherent in terms of geography and society.'

Until this turn taken by the protagonists and agencies involved in formulating the geoparks approach, the tendency had been for individuals and groups involved in the recognition and conservation of geoheritage, to operate mostly in isolation around familiar forums such as IUGS, IUCN and UNESCO division of earth sciences (Barettino et al., 2000; Prosser, 2008). The method being shaped around the geoparks model was critical of this stance. It represented and sought to promote geological heritage as a starting point, but as iterated in the first charter of the European Geoparks Network (EGN), the sites presented in a geopark territory can also carry archaeological, ecological, historical or cultural interest (Frey et al., 2001a). The overarching vision for geoparks being to convey the heritage of a landscape in its entirety, and to encourage the earth sciences not to place themselves in an elite and privileged position, or as Martini forcefully expressed it,

'I would like to say that we also have to learn that our geological sites do – and must not – belong to us geologists. If we want to make the most of them and protect them, we have to understand and integrate the dimensions and the values

of the territories in which they are situated. We have to learn to fit in'. (Martini, 2000: 156)

With the enabling support of the LEADER IIC funds, the European Geoparks Network formally came into being in June 2000 based upon the initial four territories that had pooled together around that EU programme (Martini and Zouros, 2001). However, unlike many projects that access development grants and stall or lurch from one funding pot to the next with the prime beneficiary often being the consultancy or agency facilitating the project (Lewis and Mosse, 2006a; Lewis and Mosse, 2006b) in this case the geoparks network was both the recipient of the project outcomes and the actual implementing agent. The overall objective in this case, was a long-term commitment to conservation and development through the generation of a coherent structure to sustain and expand the geopark concept. Evidence of such a commitment was visible through the fact that by the end of the LEADER project alone, the network had already accepted a further eight new member territories (Frey et al., 2001b). The valorisation of exchange and collaboration was embedded in the network's structure, by the placing of an obligation for each geopark consortia to send two representatives to each of two yearly meetings of the EGN (Zouros and Mc Keever, 2004). In addition to these internal meetings, an annual conference was launched to take place every autumn and function as a central tool to disseminate experiences, information and promotion of the geoparks model to those outside of the immediate network. The first such event was hosted by Molinos, Spain in October 2000 and in due course has become an annual activity located at a different geopark territory each year

(Frey et al., 2001b). The practical expressions and processes conveyed during these formal geopark meetings and events, are expanded upon in chapter 3.

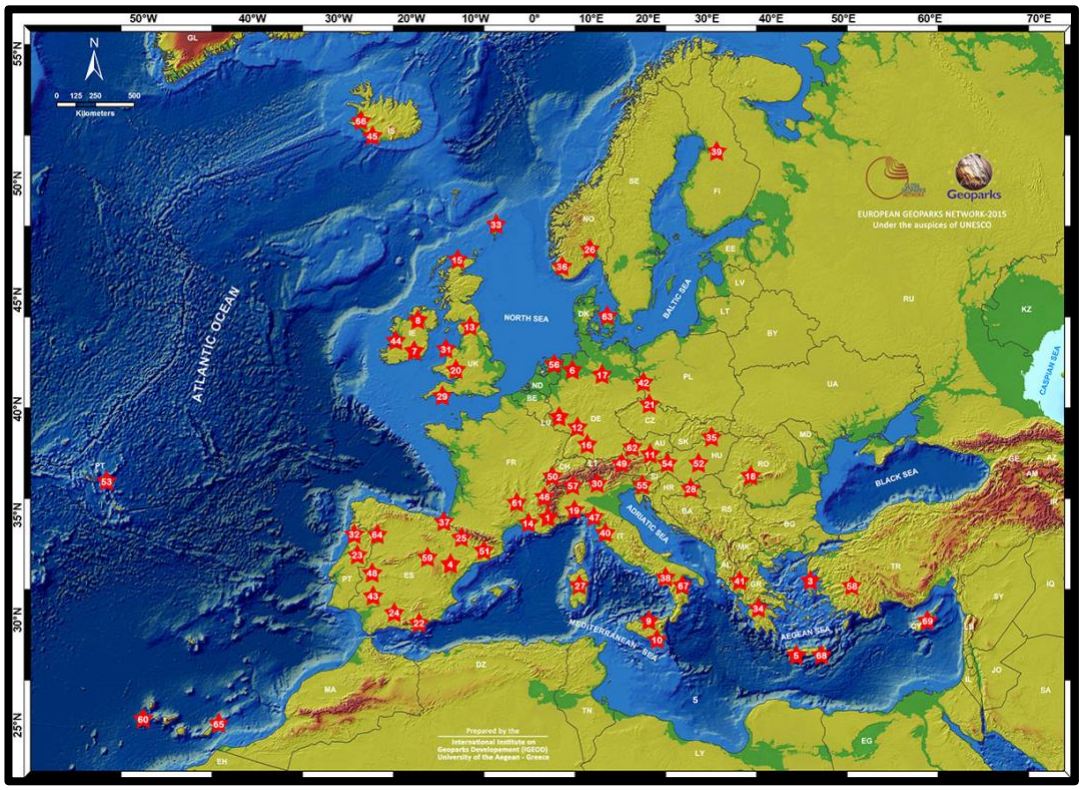

Figure 1 - Map of European geopark locations (EGN, 2017b)

In terms of clarifying or simplifying and transmitting the guiding principles, this manifested itself around a philosophical and management structure (Madonie geopark, 2004; Eder and Patzak, 2004) that was principally captured in the geoparks Charter (Frey et al., 2001b; Martini and Zouros, 2001) which has been described as capturing 'the philosophy of geoparks' (Madonie geopark, 2004). The Charter has subsequently undergone a number of minor amendments and alterations that were delivered through consensus voting across the network on the occasion of one of the regular European Geoparks Network meeting. However, the core aspects have broadly remained constant with the changes placing mostly differing emphasis or with the addition of a paragraph to reflect any changes in the worldwide structure of the geoparks model. Thus it is reported by the network

that if a geopark has understood the full principles behind the movement, they should be able to demonstrate that it has all of the following features within its territory:

- Significant geological heritage
- Geoconservation activities
- Sustainable tourism activities
- Educational activities
- Community involvement
- Strong management structure
- Secure financial basis
- Network charter MUST be adhered to - e.g. it is strictly prohibited for geoparks to engage in the selling of geological material

(McKeever, 2009)

One further facet within the structure of the EGN that had to be considered in detail, was how the process of expansion beyond the original group of four geoparks should take place. A number of factors guided the form of new geopark validation and an eventual revalidation. The roles of education, research and knowledge transfer formed one of the central pillars in the model. Furthermore, each of the geopark regions either had a local university as part of their consortium or had strong connections to a university with close and regular research activities around their territory (Jones, 2008). It was therefore not surprising that a form of peer review system was the one chosen. This was spelt out in the final article of the EGN charter,

'The EGN coordination unit at Reserve Geologique de Haute-Provence has formed an Expert Committee made up of specialists in sustainable development and the enhancement of the geological heritage from the zones having initiated this program and representatives of international structures working in the area of enhancement of the geological heritage. This Expert Committee gives advice for all decisions regarding the nomination and integration of new zones within the network'. (Martini and Zouros, 2001: 28)

The opportunity to fully devise this approach came about through another successful bid by a cluster of nine geoparks, in accessing a further round of regional EU funding. This time the source was a regional programme called INTERREG IIIC. A collective agreement was achieved across the nine regions to establish the process of revalidation, initially to be repeated every three years (later to be extended to become a four year cycle). The formal explanation by the EGN indicated that this was applied across all geoparks: '…in order to keep a high quality level in their infrastructures, services and sustainable management'. (McKeever and Zouros, 2005: 274)

1.6 - Formalised expansion to become a Global Geoparks Network (GGN)

Evidenced by its close relationship with UNESCO and the involvement of other international agencies such as IUCN and IUGS, although the opportunity through support from European Union funding meant that the EGN established itself first, the intention had always been for the creation of a global framework of geoparks (Jones, 2008). The initial discussions between Martini, Zouros and others, occurred

on the occasion of the 30th International Geological Congress in Beijing, and the ideas around the conservation of geological heritage also became quickly established in China (Xun and Milly, 2002; Xun and Ting, 2003). Subsequently, through the facilitation of UNESCO's International Geoscience Programme, meetings were staged at UNESCO headquarters in Paris to deliberate on the formation of a Global UNESCO Network of Geoparks and agreed operational guidelines (Eder, 2004). Following those discussions in the spring of 2004, agreement was reached to ensure that the by then 17 existing European Geoparks joined with eight new Chinese national Geoparks to form a Global Network of National Geoparks (GGN) under the auspices of UNESCO (Jones, 2008).

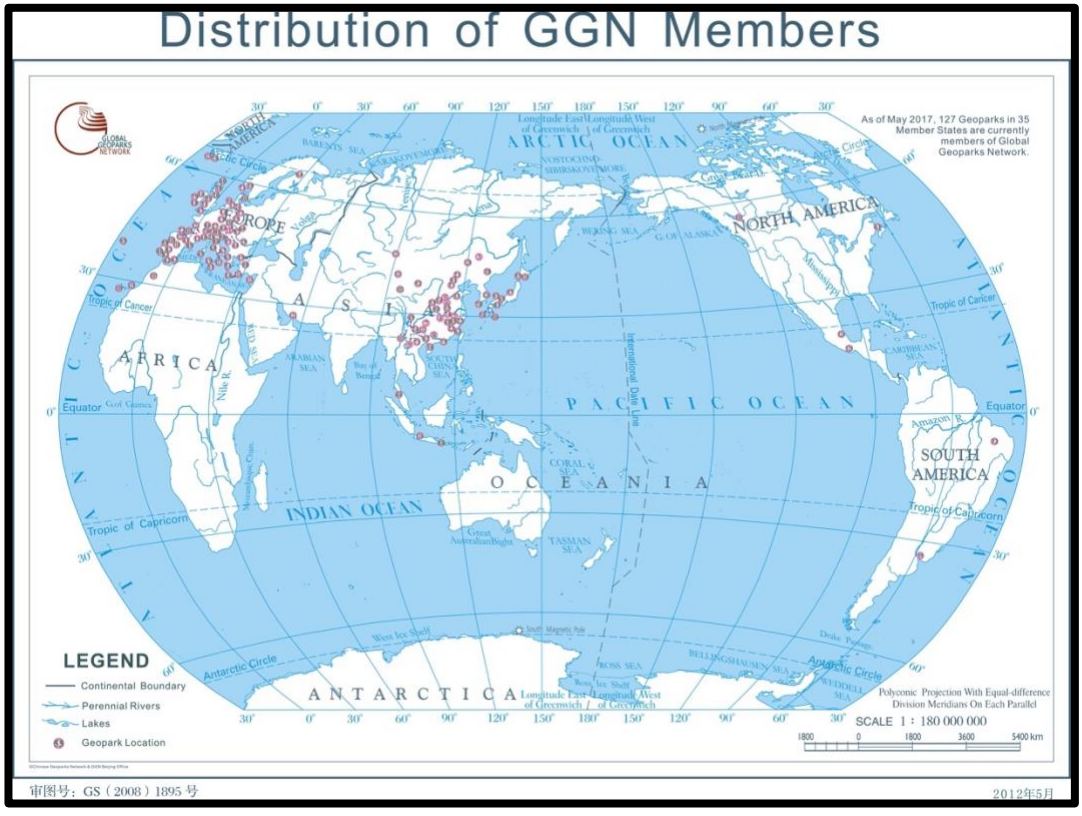

Figure 2 - Map of Global geopark locations (GGN, 2017)

This is the basis from which the geoparks model and network has continued to subsequently expand year on year. The core strategies as expressed in the

guidelines and charter have remained consistent throughout the subsequent decade and a half. Most prominently when expressed in public forums and through descriptive and promotional materials produced by individual geoparks or EGN / GGN, an unproblematic and unpackaged response is given to features of the model such as its 'bottom up' approach, or the use of geotourism as a developmental driver. Equally, since the amalgamation of the European and Chinese geopark networks to form the GGN in 2004 (Jones, 2008), where the EGN model was adopted as the basis for the creation of other continental networks of Geoparks (Eder, 2004) the standardization of guidelines and statutes has remained unquestioned regardless of local circumstances or conditions. The approach taken by the geoparks network, thus appears to accord with a standard rational choice model of policy, where at the end of the policy making 'phase' it is supposed to appear as a stabilized policy ready to be merely implemented (Wedel et al., 2005; Shore, 2012). In contrast, an assessment as seen through an ethnographic lens, may summarise that 'policy makes mere models of reality that work as descriptions of how things should be' (Strathern, 2000: 4). The method taken by this thesis in its analysis of how policy is enacted in practice around the geopark network, is inspired and draws from the type of insights offered by an anthropological assessment of public policy (cf. Wedel and Feldman, 2005; Wright, 2011; Yanow, 2011; Shore et al., 2011) and in particular adopting a sympathy for the tools used by actor network theory (Latour, 2005; Law, 2009; Mol, 2002).

The subsequent chapters that unfold first present the conceptual framework in greater detail (Chapter 2) then sumarise how the geoparks network and model negotiates the formal face-to-face committee meetings and conference events

(Chapter 3). Next I introduce the methodologies that were adopted during the research (Chapter 4), and these inform how I approached the fieldwork and analysis of data collected. The three detailed case studies, mapping out how the model is realized on the ground and which processes are used, are then offered in Chapters 5,6 and 7. An analysis of the data is then delivered and placed in the context of the conceptual models (Chapter 8). Concluding thoughts and pointers for future directions of research are provided in Chapter 9.

Chapter 2 - A convergence around Policy, Philosophy, Geology and Society

2.1 - Introduction

As chapter 1 has provided through a brief history and setting to the first two decades in the development of the geoparks model, this research sits around a complex and shifting nexus where earth and social sciences interests are converging, though not necessarily with full awareness of this from either side. It has been standard practice for much of the literature, reports and presentations on the subject (Jones, 2008; UK National Commission for UNESCO, 2012; Farsani et al., 2012; UNESCO, 2016), to begin with a definition of what geoparks are, as drawn from formal geopark sources (UNESCO and IUGS, 2016) such as the geoparks charter or EGN and UNESCO Earth Sciences websites. However, a fuller theoretical framing reflecting on why and how geoparks have emerged in individual localities, and how they aim to manage and sustain the initiative, is much less forthcoming.

This chapter introduces three overarching conceptual approaches that will most prominently be informing my analysis of the selected case study geoparks and the model more widely as practiced. The first considers the setting of geology and the Earth Sciences as the initial disciplinary and scientific backdrop to the geoparks approach. It introduces a consideration of a distinct philosophy of geology, as opposed to the long-standing position of geology residing as an imprecise derivative of physics and other 'hard' sciences (Baker, 2013; Cleland, 2001; Frodeman, 1995; Frodeman, 2003; Turner, 2014). The philosophical un-packaging of geology is presented also to provide a background to the methods, motivations

and logics which stir 'What is it like to be a geologist' (Raab and Frodeman, 2002) and consequently influence how geosciences are acted out in geoparks.

Next the connection and position of policy as a core facet of the geoparks approach is considered. This concern is tackled through the insights and methods drawn from an anthropological engagement with public policy (Shore and Wright, 1997; Wedel and Feldman, 2005; Wright, 2011; Müller, 2013; Yanow, 2011). Of importance for the development and expansion of the geoparks model, these treat the movement or transformation of policy not as the linear and essentialised transfer of a discrete defined object (Shore and Wright, 1997) but move to unpack, contest and contextualise policy and present how it is replete with agency[1], (Nielsen, 2011; Schwegler, 2008).

Then continuing to move through the means of tracking agency and the relationships between the diverse range of actors and materials flowing around the geoparks model, I outline the basic elements of the conceptual toolkit (Law, 2009) that is actor network theory (ANT). More specifically I place an emphasis upon the utilisation of those ANT tools when applied to realms of policy assemblage (Mosse and Lewis, 2006; Law and Singleton, 2014) and particularly in the context of the efforts made to ensure that alternative interpretations of policy appear to remain consistent to a hegemonic 'regime of truth' (Prince, 2012). The

[1] I am understanding agency here in the manner in which it is framed by ANT, ie. when actors have the power to change other actors, that form of power is termed agency (Latour, 2005, Law, 2009)

latter, has more recently been described as a practice of syncretism (Law et al., 2014; Mellaard and van Meijl, 2016)

2.2 - A philosophy of geology: implications for a meeting ground between earth science and the humanities

The primary ethos and motivation for the creation of the geoparks model has been presented as being based around a concern to raise awareness, interest and generate actions to further valorise and conserve geological heritage and diversity (Martini, 2000). In order to allow these concerns to be addressed, a greater understanding and reconnecting with the planet and its landscapes, is promoted by the voices from within the geoparks networks committees and influential actors (Eder, 1999; Nowlan et al., 2004; McKeever and Zouros, 2005). In turn this requires closer and stronger linkages between the Earth Sciences, humanities and social sciences, which have historically generated little collaborative work (Frodeman, 1995). The emergent philosophical stance as iterated by the geoparks network members, is rooted too in a desire to address a perceived neglect, and to bring geology forward as a distinctive discipline that offers profound insights in to the earth we inhabit and our interaction with it (Martini, 2000; Martini and Zouros, 2001; Martini et al., 2012).

This perspective, particularly as expressed by Martini (Martini et al., 2012), echoes with the argument that a distinct philosophy of geology exists, as presented in both an applied and an academic setting (Baker, 2013; Cleland, 2011; Frodeman, 1995). In the past two decades especially, a number of voices have begun to emerge

calling for the necessity of Earth Sciences to break out from disciplinary silos and observe a far wider suite of diverse materials and processes when considering issues such as global climate change, the loss of biodiversity, and the geologically immanent loss of natural resources (Turner, 2013; Vann and Stewart, 2011; Cleland, 2011; Bobrowsky et al., 2017). Most prominently, Robert Frodeman (2003: 4), who drawing from an initial background in philosophy, has stressed that,

'[u]nderstanding our relationship to the Earth in all its facets is one of humanity's most basic challenges. Used in this more original sense, geology belongs as much to culture as to nature, and should be as deeply rooted in the humanities and in our public lives as in the sciences.'

Beyond the bare scientific search for understanding and contextualising the manifestations and implications of geological 'deep time', Frodeman (2003) proposes that the Earth Sciences and social sciences function and coalesce in a number of loci. Three terms he uses to describe those situations are, '*geo-poetry*' in which geologists approach outcrops and landforms as poet semioticians, '*geo-politics*' in the sense of engaging towards dominant issues that are highly informed by an earth science perspective (this includes climate change, species extinctions, resource exploitation), and '*geo-theology*' outlined as considering human responses to nature and the demands she places upon us in the form of rights and obligations. Bringing in to consideration the data gathered in the case study sites, it is apparent that each of the aforementioned loci can be identified and reflected upon within the context of geoparks, then utilised to support the message of how

geology can provide an expansive and encompassing vision of the relationship between humankind and the Earth we inhabit. However, before progressing further, it is valuable to briefly outline again the core methods through which geological knowledge and insights are gathered, as these inform how the Earth Sciences seek to convey narratives and information in the setting of a geopark location. With respect to the philosophical position through which to consider those methods, Frodeman (2014), explains that 'when we view the Earth Sciences from the perspectives of continental philosophy, certain features that had been left in the shadows begin to show themselves'.

A continental philosophy most characteristically draws upon the application of a hermeneutic approach to understanding, via its most profound influence from the work of Martin Heidegger (Heidegger, 1962). He argued that understanding is drawn from a to and fro combination of concept and percept. This is most familiarly recognisable in the change in our awareness of an object when we consider it with a new array of perceptions or anticipations (Babich and Ginev, 2014). In a geological context this can be observed for example by the lack of significance a faint imprint in a mudstone may be given by a lay observer, until they are introduced to further conceptual elements to look at the strata by a geologist or guide with geological training. The process is typified in particular by three core concepts. Firstly there is the hermeneutic cycle, which stems from the claim by Heidegger (1962) that our comprehension of the world is essentially circular as we move to grasp the relationship between the parts and the whole, or vice-versa. Again this may be viewed from the perspective of the Earth Sciences, in the way that say a cliff face on the headland in the English Riviera Geopark can be

considered and understood at the level of the entire outcrop with its structures and positioning to other rock formations, headlands or curves in the bay. Or on the level of a single layer of strata, that informs ones comprehension for instance on the varieties of sediment and the environments of their deposition.

A second component of the hermeneutic process that is equally visible in the everyday applications of geological reasoning, are known as the fore-structures of understanding (Frodeman, 1995). Heidegger (1962) categorized these into three forms, *pre-judgement*, that is the theories and structuring ideas of our pre-conceptions; *pre-sight* of the objective to our inquiry; and the specific practices and tools of our *pre-having*. The third element stems from the onus placed upon the historical nature of knowledge, and this is notably present in the manner by which the Earth Sciences are thought through particularly by the use of narrative (Cregan-Reid, 2015; Gould, 1987). This is highlighted in geology by the emphasis in much of its research, which does not aim to confirm or deny overarching laws, but to account for specific occurrences that have taken place in a set locality (Frodeman and Baker, 2000). One further characterizing facet of a narrative logic that is worth noting, is the presence of a moral structure which Frodeman (2003: 93) describes in these terms, 'Narratives look to the future, not in the scientific sense of making predictions, but in Aristoltle's sense of being concerned with final causes. A story always expresses a moral vision of what the future should look like (or in the case of dystopias, through warning us of an undesirable future)'. Gathering together these rudiments, geological science is considered through this continental philosophical lens as forming a sort of bricolage, with 'scientific facts

that parametize an issue, narrative providing the overall goal and moral purpose' (Frodeman, 2014: 77).

2.3 - Policy as formulated through the geoparks model

In the nascent period of the geoparks model, the awareness or suitability to connect into these emergent thoughts around a philosophical positioning of the Earth Sciences, was not forthcoming. Actually whilst explaining the practical and continuing challenges faced by parties interested in geological heritage, in generating a wider acknowledgment and valorisation of this aspect of patrimony, the move was initially away from formulating a more compelling scientific or philosophical argument for the necessity to protect (Barettino et al., 2000). Instead, Martini (2000) indicates that the practical decision made at his place of work in the Haute-Provence Geological Reserve, was to consider and emphasise the economic value and benefits of this heritage, in particular as channelled through geological tourism (cf. Hose, 1996; Dowling and Newsome, 2010; Martini et al., 2012).

With the further strategic move of collaborating alongside sympathetic and like-minded colleagues clustered in geologically significant locations in Europe, whilst seeking European Union as well as national funding, the concept of geoparks travelled in directions that brought it into contact with an expanding variety of policy considerations. Martini (2000) indicates where some of these interactions might lie, including around local economic interests, regional concerns of rural depopulation, and in the primary consideration or starting point of the geoparks

concept, regarding heritage conservation and in particular geological heritage. Martini considers that this melange may be drawn together and considered as an overarching policy addressing sustainable territorial development (2000: 155).

The making and shaping of policies within geoparks can therefore be seen to constitute a fundamental aspect contributing towards shaping and suggesting how the model may be delivered. A more detailed analysis of how and why policy is perceived, interpreted and generated in different geopark settings, and the implications this has when enacted around a single universalizing concept and charter for geoparks, will be presented in the three case study chapters.

2.4 - Anthropology of policy

Having established that the geoparks approach has travelled down a route of addressing its central tenets through the establishment of a policy framework, it is helpful to assess what 'policy' is understood to entail, and what sorts of questions and issues such examinations provoke. The ways in which those investigations are structured, are steered by the specific disciplinary traditions and modes of study from which the research is directed. The study of policy has a considerable history across a range of disciplines including political science, economics and sociology (Wedel and Feldman, 2005).

The dominant argument selected by policy professionals has been to take the view that there is a logical and linear cycle whereby 'policies' are the outcome of pronouncements made by a particular rational agency, that implements

administrative actions to resolve certain 'problems' and generate an accepted or preferred result (Shore and Wright, 2011). Following that position, one progresses through a chain known as the practitioner approach which leads from an initial analysis to appraisal/selection to implementation to further evaluation to revision (ibid). Policies as understood from this perspective, are considered to reflect an ideal enclosing of rational, informed and objective decisions, where effects are determined in terms of quantifiable costs and benefits (Shore, 2012). When reflecting again into the policy world of geoparks, this interpretation appears to hold sway, with the principle questions and realms of research being predominantly framed around a desire to consider and quantify the economic benefits that are the outcome of applying the geoparks model (cf. Härtling and Meier, 2010; Xun and Ting, 2003; Cheung, 2015).

Figure 3 - Policy movement expressed in geology communication at regional museum, this example in Madonie UNESCO global geopark, Italy (Jonathan Karkut, May 2010)

Another significant concern within political sciences and policy studies, centres on how policies travel internationally. The principle approaches all advance from a positivist position with explanations centring on 'agentless structural forces', with limited regard for individual actors (Shore and Wright, 2011). By contrast, an anthropological response to policy reflects upon 'the myriad interactions and alliances involved as actors move between local, national and international institutions in pursuit of their interests: they show that it is through these negotiations and political struggles that policies travel across scales and sites' (ibid: 7). Part of the anthropological perspective is to recognise and learn how to challenge received wisdom and apply an interpretive approach. This challenges the implicitly authoritarian view of policy as a process that is restricted, linear, logical and hierarchical (ibid).

Studies centred around public policy as directly assessed from an anthropological stance, have only started to fully emerge in the past few decades. The following section considers the ways in which those anthropological studies have helped to critique and conceptualise policy. One of the earliest rallying calls for action from the social sciences, was made by Laura Nader. In response to the critique at the time, that anthropology was overly preoccupied with traditional communities in distant colonial settings, she urged anthropologists to engage in "studying up" in their own society, most particularly in terms of examining agency around businesses, corporation or governmental institutions (Nader, 1972). However, the study of policy is concerned with much more than just the 'powerful institutions' that Nader (1972) refers to. The contexts, processes, language and assumptions that direct policy, are all significant facets of how anthropology approaches

considerations of public policy (Wedel et al., 2005). Initially motivated by the political paradigm shift in Europe and North America, that moved from the post-war approach of welfare state, towards neo-liberal methods of formulating governmental policies, the pioneering work of Shore and Wright (Shore and Wright, 1997) adjusted to consider 'anthropological insights into the new structures through which policy operates and the discourses and agencies through which it is articulated' (ibid: 4).

2.5 - What policy is in anthropological terms?

When policy studies are critiqued through the application of anthropology, not only does it open up new ways of looking at policy arenas, but creates a shift in understanding which processes may be involved in policy development and how they are enacted (Shore and Wright, 2011). Policy as a simplified term, is challenging to define concisely, not least as it has spread around in such a diverse range of settings and contexts, being commonly utilised both at the pinnacle of business and government, to experiences in everyday life (Wedel et al., 2005). In such a complex circumstance, a starting point can be to point towards what a term is not - which is often how the term geopark is prefaced, commonly beginning with the phrase 'a geopark is not just about rocks' (Bailey and Hill, 2010; Gray, 2013; UNESCO, 2016c). For instance when approached from the corner of anthropology, policy is not treated 'as an unproblematic given but rather as something to be problematized' (Shore et al., 2011). At the same time anthropology does not view policies as being essentialised, discrete, bounded objects, but continually contested

'…political processes in which actors, agents, concepts and technologies interact in different sites, creating or consolidating new rationalities of governance and regimes of knowledge and power'. (Shore and Wright, 2011: 2)

Those explanatory sentences demonstrate that researchers studying policy through anthropological methods and theory, have concerns as to how policy has been packaged, presented and then studied at face value. Considering that policy is a significant tool used by public, private and non-governmental sectors to regulate and classify subjects, it is surprising that there has not been greater 'critical sensibility or public skepticism toward the idea of "policy" (Wedel et al., 2005). It is therefore given that a major part of anthropological investigation of policy areas, is concerned with examining not a specific people or individual institution, or less still policy as a boxed and packaged object, but to follow changing processes that are shaped within political and social contexts (Shore and Wright, 1997).

A further attribute of policies is that once generated, they often migrate into new contexts and settings, where they may transform to bring ramifications that stretch past the aims for which they were originally formulated (Shore and Wright, 2011). Within the context of the geoparks model, such a step may be observed in the transformation from their initial development in a close collaborative European framing, to first an expansion to Eastern Asia and then more recently to the Americas and Africa. During the same time span, the geoparks concept has evolved from a 'grassroots' policy response to a perceived lack of governmental interest or action (Martini, 2000), to a global network increasingly connected to

supranational organisations and their respective priorities and strategies (Fukami, 2014).

In such phases of expansion and migration, there is potential for policies to directly transform the locations into which they have been introduced (Power, 1997). With the rapid mobilization of geoparks into landscapes (political, physical and social) far removed from their European origins, tensions are beginning to emerge both in terms of the policy of how geoparks proliferate around the world, and in how locations interpret the model through the lens of their respective local, national and regional policies (Azman et al., 2011; Errami et al., 2015; Farsani et al., 2012; Ngwira, 2015). The ways in which policy weaves such complex trails, relations and develop their own 'social lives' (Appadurai, 1986), are therefore concepts that will be explored in greater detail further in to this thesis.

A key aspect of policy is how it is visualised at different moments and sites as it moves through time and space. Policies can thus be deliberated upon as contested accounts or descriptions that 'project only one viable pathway to its resolution' (Shore and Wright, 1997). Drawing from this point, it may be of interest for instance, to identify the formal narrative of geoparks policy as presented through the committee structures of the European Geoparks Network (EGN) and the supporting mechanisms within UNESCO Earth Sciences department, and then see how individual geopark sites – or rather representatives within those geoparks – perceive that policy as it interacts with the specific setting of the geopark. Which perspective will prevail? To what degree are different perspectives, or sets of practices accommodated within and around the hegemonic position?

Such a flow and flux of policy underscores that the study of policy is as much about the 'governed' as the 'governors' (Shore et al., 2011). The expansion of the GGN into new political, social and geographical domains, demonstrates the substantial reach a study of geoparks policy could extend. The global reach, however, would be too much for a single PhD thesis to cover. Hence for practical considerations, an important decision is to select a set of more manageable sites, which simultaneously expose the broader processes (Schwegler and Powell, 2008). In this thesis the sites chosen are those of the three case study locations (Chapters 5,6,7), along with additional attention through the face-to-face network encounters conducted at formal geopark meetings and conferences.

Following such a maxim of 'study small reflect large', points one towards the multi-sited ethnography considerations as first presented by George Marcus (Marcus, 1995), who suggested the anthropologist may pursue an element through the field in order to follow a system or process. That element he mentioned could be, a thing; a conflict; a people; a biography; a story; a metaphor. Shore and Wright (2011) suggest that element could equally be a policy.

In defining the emerging anthropology of policy, Schwegler and Powell (2008: 3) outline that it is now about combining interest in the effects of policy with 'an intimate understanding of the mechanisms behind its development, proliferation and implementation'. As policy is not considered in the anthropology of policy as a reified or material thing, the ethnographer can arrive with, 'a healthy scepticism of the discourses and practices that naturalise institutional power and insulate them

from interrogation, a distanced perspective that enables us to shed new light on process that our informants take as given'. (Schwegler and Powell, 2008: 8)

2.6 - Bringing an Actor Network Theory (ANT) sympathy to the policy table

As the descriptions of policy as viewed through an anthropological perspective have outlined, it is through forms and flows of agency, rather than rigid, linear movements, that we are most effectively engaged. Furthermore, in the parlance of ANT, policies may we viewed as being 'actants' - that is 'anything that modifies other actors through a series of actions' (Latour, 2004). Policies,

'have agency; they shift action; and like machines, they perform tasks and are endowed with certain competencies. Importantly, actants typically interact with other social agents in processes that are dynamic and contingent, and therefore have unpredictable effects'. (Shore and Wright, 2011: 3)

Before viewing more closely how an application of ANT tools are beginning to be applied to practical policy cases, it is worthwhile passing through some of the critical components of ANT, not least as it has passed through numerous studies and iterations, or as John Law (Law, 2009: 141) describes, 'Actor network theory is a disparate family of material-semiotic tools, sensibilities, and methods of analysis that treat everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located. It assumes that nothing has reality or form outside the enactment of those relations.'

2.6.1 - Introducing ANT

As implied in the framing statement provided above by John Law, seizing upon a set of principles or guidelines is not how ANT was intended to be applied. Rather this form of approach is held by its advocates, to be most effective at conveying accounts concerning the ways in which associations are brought together, or not. Thus it is more aptly described as being a toolkit through which to consider and gain a clearer understanding about relations (Latour, 2005). Furthermore, ANT takes the investigator beyond narrative description by offering 'a sensibility to the messy practices of rationality and materiality of the world' (Law, 2009: 142).

Part of the difficulty some readers and audiences have found in more fully comprehending Actor-Network Theory, has derived from ambiguity in some of its key terms. For instance the word 'network' as most commonly understood in English is viewed as being a thing in the world such as an underground network or a social network composed solely of human relations. 'Network' in the context of ANT is seen as building beyond such flat two or three dimensional considerations and in addition 'accounting for the very essence of societies and natures' (Latour and Porter, 1996) thus retaining a strongly ontological component.

Subsequently, refinements have been made to provide a more unequivocal term, hence Law (2009) has suggested it may be better to describe the approach as being a form of 'material semiotics'. This expression also grasps more effectively the ways in which ANT has been considered and applied beyond a single dogmatic paradigm. Instead it has been repositioned and employed across a wide range of contexts and disciplines and reworked through a flexible usage of its 'toolkit'

crossing what Law (2007) describes as a diaspora of applications. The diaspora of ANT usages bring with them a number of theoretical means that are most effectively utilised and observed by way of case studies. As Law (2009: 144) stresses, 'knowledge lies in exemplars and words are never enough'. Nonetheless, like the way ingredients are chosen for a good pesto sauce in Liguria, from a multitude of options certain significant components can always be identified. From the point at which ANT solidified as an approach at sometime between 1986 and 1994 (Latour, 1999b) these components have subsequently formed the basis from which the ANT 'diaspora' have been able to progress. Through the usage of empirical case studies they have shown a range of possibilities that outline an ANT 'noise' rather than a direct 'signal' (Law, 2006b).

One cornerstone of ANT is that it is focused around the organisation, methods and flow of agency (Latour, 2005). It is argued that agency is derived from the configuration of a network rather than from any intrinsic qualities of any particular actor. Therefore the most appropriate form of investigation is to initially deal with each actor symmetrically and not to begin attempting to prove any particular form of explanation or paradigm (Latour, 1993). Instead one empirically follows the associations to view how agency, structure, scale are generated. A further aspect of studying the materials that come together around a network, is that it becomes soon apparent that actors come in the form not just of human beings, but as the net around the Eyjafjallajökull volcanic eruption of 2010 has shown us, a heterogeneous mixture of elements such as meteorological models, policy documents, prevailing winds, aircraft engines, conferences and of course

tiny volcanic ash particles all of which have considerable effects on the ordering and defining of the network (Lund and Benediktsson, 2011).

Equally, it is apparent that these heterogeneous materials are drawn from a number of areas that the social sciences have defined, divided up and viewed side by side. These may include the "social", "natural – geological", "economic", "technological" domains, which actor network theory approaches not in isolation, but considers in detail how linkages, associations, collaborations and the like are established across any number of heterogeneous spheres (Latour, 2010). The separations and barriers between domains such as "nature" and "society", which are generally taken to be foundational can now be erased (Law, 2009) and in so doing this allows us to shed light on the type of complex relationships that bridge any number of those 'former' islands in an archipelago of domains.

Latour (2007) points in particular to the substantial impacts that the ecological crises of the late 20th Century, such as the ozone hole and global warming, have had on speeding up the breakdown of these categories. Whereas in the 1980's it was a mammoth task for those engaged in science and technology studies to 'associate a given matter of fact to the human groups responsible for its coming into existence, it seems nowadays that there is hardly a matter of fact left without its associated constituency' (Latour, 2007: 78). From 'surfers against sewage' to the 'woodlands trust' each form of flora, fauna, ecosystem or landscape now appears to have its own cluster of volunteers and activists. Not to be left behind by the advocates of ecological concerns, this was the environment in which an

urgency to equally address the conservation of geological features, spawned the concept and model of geoparks (Jones, 2008; Burek and Prosser, 2008).

Figure 4 - Assemblage of heterogeneous materials and actants as visualised around Njals saga tapestry, Katla UNESCO global geopark, Iceland (Jonathan Karkut, April 2014)

These cases outline the extensive range of materiality that ANT offers insights in to. But a further key consideration of the approach is its emphasis in exploring the manners and routes by which materials come together to form 'Patterned networks of diverse materials' (Law, 1992) and the uncertain ways in which they hold steady in any position. As outlined earlier, the assemblages of actors include not just human beings, but also, because we interact with numerous other resources, the non-human forms. This brings into the frame, things such as; texts; buildings; machines; currencies; animals; and as we are thinking about geoparks, elements like quarries and mines or natural features like cave systems or fossils. All of these actors are always a network themselves and come together to form

additional networks around the pursuit of projects, that is shared interests (Latour, 1999b). ANT focuses on how this coming together happens, how it is mobilized, inter-related and held together or resisted.

Within these struggles there are a range of ways in which actors perceive they have grasped the correct version or the correct interpretation of, in this case, the geoparks model. These collective discourses are the foci around which actors seek to recruit and consolidate. When examining and describing these local manifestations of how a patterning becomes visible and understandable this transformation is termed a *translation* (Latour, 1999a). The concept of "translation" as utilised by ANT considers all of the associations and steps that contribute to the construction of a network, including;

'the intellectual moves that facilitate moving the knowledge process along as well as the physical movement of people and things from one place to another'. (Levi and Valverde, 2008: 810)

Such a notion of translation thus helps us to understand how actors such as a volcanic ash particle, a Rolls Royce jet engine and a meteorologist in the UK Met Office can share the same network if only temporarily. Furthermore the principle of symmetry across such heterogeneous actors is not stating that there is no distinction between non-humans and humans, but rather that 'neither human agency nor technological/cultural determinism is assumed a priori' (Levi and Valverde, 2008: 810), thus allowing the investigator to observe a far wider gathering of empirical options. The process of translation relies on a number of

strategies in order to pull together actors and overcome resistances. But true to the demand within ANT for empirically researched case studies, it is argued that translation is contingent, local and variable (Latour, 2005; Law, 2006b). However, from the analysis of findings across ANT 'diaspora' studies, it is still reasonable to outline certain general approaches to translation.

The first of these relates to robustness and resilience. It is fairly uncontentious to state that certain assemblages committed into inanimate forms generally maintain their shape longer than if they were performed simply through face-to-face contact such as speech (Law, 2003). ANT consistently stresses that 'everything is a relational effect' (Law, 2004), thus the durability of particular materials is still a function of their arrangement within a network, not through any innate qualities. To return back to the Icelandic volcanic ash cloud as an exemplar of this constant rationality. Rolls Royce jet engines although they are generally constructed from durable materials, they tend to work more effectively when operating as part of a network that includes flows of communications and policy documents shared between volcanologists, meteorologists, airline operators, pilots and others that assemble to keep those engines away from highly abrasive and disruptive ash particles (Benediktsson et al., 2011; Lund and Benediktsson, 2011).

Mobility is another critical feature when attempting to create lasting translations. ANT considers in particular the methods and resources of communication such as email groups, representative meetings, decision making forums or committees, which can generate the possibility of conveying what Latour calls immutable mobiles (Latour, 1990). In the context of geoparks immutable mobiles may include

the European Geoparks Network (EGN) / Global Geoparks Network (GGN) revalidation document (GGN, 2013; EGN, 2017a). This template structured by UNESCO in Paris, is transmitted to geoparks around the globe once they have been a member of the EGN/GGN for a period of four years. The sections are the same for each geopark being re-assessed and are a way of controlling and surveying the periphery of the network from the centre of the coordinating committee that judges the responses to the document.

Further cases studied within the ANT diaspora, most significantly that conducted by Annemarie Mol (2002) when investigating medical responses to lower limb atherosclerosis, have also identified that translations can often produce multiple networks. These 'may dovetail together, but equally they may be held apart, contradict, or include one another in complex ways' (Law, 2009). Furthermore, degrees of adaptability or fluidity can be the way in which translations find more long lasting success, with a key factor being the mutability of the mobile instead of the rigid immutable version that Latour identified (Law, ibid.). The recognition of reasoning behind a network architecture and the study of types of formation that can lead to comparative solidity which have just been described, were the response that Actor-network theory made to the possibility that it would be left simply describing and deconstructing an endless stream of individual cases (Latour, 2005). This array of potential strategies reflects some of the first tentative steps that have been made by both social scientists, and earth scientists lead through an advance party of volcanologists (Donovan et al., 2012; Donovan and Oppenheimer, 2014; Donovan and Oppenheimer, 2015) to find a common inter-disciplinary ground within the framework of ANT. But how might such an

approach be utilised to tackle the specific task of this thesis, that of examining the organisation and processes of agency around the geoparks model and network?

2.6.2 - An ANT engagement with policy

Considerations of policy from an Science, Technology and Society (STS) stance, have started to look into more profound ontological and metaphysical directions, than as could have been read using the early 1980s and 1990s iteration of ANT (cf. Law and Singleton, 2013; Law and Singleton, 2014). When policy is seen to travel, the traditional perspective sees movement through one of three moves, policy diffusion, policy transfer, policy convergence (Shore and Wright, 2011). By contrast anthropology addresses the messy interactions, and challenges received wisdom with its taken for granted perspectives. One feature that passes through all the explorations in practice when utilising an ANT sensibility, is that there is an aversion to fixed or set approaches, static frameworks and least of all singular rules when applying how systems are ordered (Law, 2016). But at its root ANT after numerous iterations, and after having been expressed through examining all manner of case studies in alternative contexts (Latour and Porter, 1996; De Laet and Mol, 2000; Mol, 2002; Verran, 1998; Haraway, 2006; Singleton, 2010) can be synthesised down as being a way for mapping together heterogeneous assemblages of human and non-human actors and their 'practices of association' (Law and Singleton, 2014).

When an ANT approach is adapted to the context of a policy, the subsequent charting of forms of assemblage uncovers a multitude of practices. For example in the case of geoparks the policy is enacted differently by the geopark coordination

team, as opposed to how it is realised by a local councillor in the consortium, and again differently by the two geopark evaluators during a revalidation mission. With each enactment of the geopark policy, the assumption is that guided in this case by the geopark charter and guidelines, there is a single reality where policy is a 'unified concrete thing' (Mellaard and van Meijl, 2016) and the alternative practices are merely different perspectives (Latour, 2005).

The ontological position argued by ANT theorists (cf. Latour, 2005; Law and Singleton, 2014; Mol, 2002) is that in addition to this multiplicity of practices coming through a variety of stakeholder perspectives, because the materials and the interactions involved are practised differently, each assemblage is 'actually a different thing' (Law and Singleton, 2014). This is not to suggest that bringing together differing enactments of an object such as policy is trivial or that an assemblage can be just ushered into existence (Law, 2015), the process is arduous to achieve. In the setting of this research for instance, the efforts needed to generate an effective geopark have been described as "like building a kite, keeping it in the air, and providing the wind to maintain its flight!"(EGN interview, 2015). But equally, the concept of material rationality, as argued and struggled through using alternative expressions and metaphors such as 'Modes of existence' (Mol, 2002), suggests there is no single framing reality. In the case of geoparks ANT would indicate that although the approach is articulated as a single and linear transference of geopark policy, there is no singular policy reality as practiced. Rather the issue is that there are wide array of practices, so to paraphrase (Verran, 1998) how may the different geopark policy realities manage together and effectively? A further conceptual consideration that seeks to build upon that sort of

question, and to uncover how multiplicity and non-coherence may work to find forms of amalgamation into a single organisation or single policy, has drawn from the term, syncretism (Law et al., 2014; Mellaard and van Meijl, 2016).

2.7 - Syncretism in policy

The concept of syncretism is shared across a number of disciplinary boundaries, notably anthropology and religious studies, and in each the term has been strongly contested and debated (Law et al., 2014). Van der Veer (1994) adds that the concept is 'regarded positively by some, as promoting tolerance and negatively by others, as promoting the decline of the pure faith' (1994). Compressing the many different interpretations, Kraft (2002) suggests that syncretism can be used in a normative or descriptive manner. In the former the stress is upon upholding the limits in order to guard purity of 'the true faith' (Van der Veer, 1994) in a doctrine. In comparison when considered descriptively, the emphasis is upon tolerance and coexistence as a means to inhibit clashes across practices of disparate religious doctrines (Pye, 1994).

Taking their inspiration from the definitions and debate of the term by religious studies scholars as outlined above, Law et al. (2014) argue that it is helpful to extend the term into settings where there is a similar balancing, that involves a simultaneous combination of singularity or 'purity', with multiplicity or 'impurity'. Together these aspects enact a process of *both/and*, that is they 'perform unity and appear coherent, but underneath lies a heterogeneous patchwork of logics and knowledge that is messy and non-coherent' (Mellaard and van Meijl, 2016: 12). To

qualify this simultaneous manoeuvre of 'pure' and 'impure', Law and colleagues (2014) as always in the discipline of STS, work with and through case study examples to identify a number of what they call 'modes of syncretism' by which it can be enacted. The six modes initially identified through empirical analysis are termed, denial; domestication; separation; care; conflict; and collapse. Rather than suggesting a particular attempt at syncretism is held together by one of those six styles, there is the possibility for overlap and mixing of the various modes (Law et al., 2014), and as further cases and narratives are explored other modes of syncretism may transpire.

The presentation of the modes of syncretism as tactics to manage difference and find effective ways of holding practices together, certainly resonates with the situation around the policy of geoparks as introduced in the previous chapter. The centralised and singular description as framed especially in the geoparks charter, shares many of the qualities of the 'pure' aspect. Whilst the different geopark assemblages as visible in other geopark sites, hint at 'impure' enactments of a geopark. However, at the core of an STS and ANT consideration is a drive not to establish static, singular solutions but to acknowledge non-coherence or 'messy' (Law, 2004; Law, 2006a) assemblages and practices. Then empirically through the utilisation of case studies, work with variances to examine 'ways of going on well together in difference' (Law, 2016).

The dismissal of simplifying normative codes and resolutions would however be a challenge in the realm of the geoparks model. As considered in the earlier section looking at the formulation of a philosophy of geology, the discipline which plays a

dominant role in shaping and forming the geoparks approach, has grown out of a strong analytic hard science tradition that considers mess a deficit (Raab and Frodeman, 2002), and is instead drawn to scientific precision and law-like coherence and generalizations (Raab and Frodeman, 2002; Frodeman, 2014). Set within this background, the pressing for consistency and solidity in the geopark 'brand' (EGN, 2017b) is positioned with a significant test when the geopark pillars of conservation, education and sustainable development also bring multiple responsibilities for earth scientists, 'that charges them with the task of understanding and responding to community values in addition to their traditional commitment to scientific excellence' (Frodeman, 2003). The three conceptual strands introduced in this chapter, therefore seek to provide the subsequent ethnographic fieldwork with sufficient tools to follow the practices of geoparks on the ground, and view how the challenges of geopark policy are being met. The next chapter brings those issues into frame firstly within the more central and formalised settings of the collective geopark network committees, meetings and conferences.

Chapter 3 - How the geoparks organisation formally negotiates itself

3.1 - Introduction

As the introductory chapter to the evolution of geoparks indicates, the approach is considerably more than a simple static model or concept. From the onset geoparks have involved a combination of local partners in each geopark location, that are required to negotiate between issues of conservation, development and educational as considered and managed by the model. Additionally from the moment that Reserve Geologique de Haute Province (France), Natural History Museum of the Lesvos Petrified Forest (Greece), Maestragzo Teruel (Spain) and Gerolstein protected area (Germany) came together as a partnership seeking financial support from the European Union LEADER-IIC[2] programme, a policies driven organisation and form of networks was generated.

In addition to the communication and dissemination demands of the EU project, that typically involve an element of facilitation through face-to-face meetings and events, the ethos behind the model also sought to encourage consistent exchanges in order to work through ideas, perspectives and find practical solutions to the overall challenge of addressing sustainable territorial development through bringing together the earth sciences and society (Martini, 2000).

[2] Leader is an acronym for ***Liaison Entre Actions de Développement de l'Économie Rurale***, meaning 'Links between the rural economy and development actions'. It is a local development method which allows local actors to develop an area by using its endogenous development potential (European Commission, 2015)

This chapter presents how those tasks are negotiated and manifested through a combination of formal meetings that are now explicitly outlined in the operational rules and articles of the European Geoparks Network (EGN, 2015), as well as through a number of other less formalised gatherings. It will examine how the latter take place as different groupings come together to work on funding bids, around activities within existing projects, or through alternative bi-lateral twinning with what the geoparks coordination committee have come to describe as 'sister geopark' locations (these often have a thematic connection – coastal, urban, mining, volcanic landscapes etc.).

Through a diverse combination of public, private and civil society based organisations coming together inside geopark management consortia, allied with the broad spread of political, geological and cultural settings for the now greater than one hundred global geoparks, there are numerous responses, interpretations and utilisations of the geoparks model to consider. Equally, as the geoparks network has expanded and evolved over a period of more than fifteen years, further factors influencing the processes in and around the network, have come into play. The chapter thus has the opportunity to also consider the impact of relationships that exist between long standing geopark members, some of whom push for an active role in the central advisory and coordination committees, whilst others are comfortable resting on the fringes of the network. There is also the consideration of newcomer geoparks, since every year from 2001 onwards there have been further sites added to the network. In particular it is useful to examine the challenges those new to the network have in integrating inside the existing framework.

The annual European Geoparks Network (EGN) conference, and biannual Global Geoparks Network (GGN) conference also provide some of the more prominent focal points for exchanges between geopark 'insiders and outsiders'. Through attendance at many of those events since 2009, an opportunity is provided in particular to consider my fluctuating part EMIC and part ETIC (Harris, 1990; Morris et al., 1999; Hammersley and Atkinson, 2007) position in relation to the geopark network. As the geoparks coordination meetings are closed to those outside of the network, the conferences also provide an exceptional opportunity to conduct participant observation regarding the interactions of geopark network members and the flows of agency around the network (Schwegler, 2008).

During the period 2010-2015 a large proportion of the efforts across the network as a whole have been directed towards gaining geoparks a formal position within the programmes of UNESCO. Therefore there is an emphasis here on viewing the broader framework of policy in and around UNESCO, in particular how the programmes of that organisation have become so shaped by politics, rather than via the purely scientific or technical criteria that are used to formally devise the programmes and structures of the organisation (Meskell, 2015). Framed within that backdrop, it is possible to consider the interactions between individual geopark representatives, national geopark committees and national UNESCO commissions, to see how the interplay between the geoparks network and the natural sciences commission within UNESCO, guides, shapes and is shaped by policy processes from both sides.

The structure of the European Geoparks Network, which has been the leading influence for the global model, points firmly back to its origins as a consortium of four territories that came together to function inside a European Union LEADER-IIC project. As is common in regionally focused European Union funded projects, mobility around and between project partner organisations is a fundamental action used to encourage a pooling and sharing of ideas and concepts around a central objective. That approach was adopted by the emergent geoparks of Reserve Geologique de Haute Province (France), Natural History Museum of the Lesvos Petrified Forest (Greece), Maestragzo Teruel (Spain) and Gerolstein protected area (Germany), and embedded into the articles of association which formed the first European Geoparks Network Charter that were first adopted by this group of four in the year 2000 (Martini and Zouros, 2001).

The prominence of the collaborative approach adopted was highlighted at both the individual geopark level, through article 2 of the charter which stated 'the sites in European Geopark must be linked in a network and benefit from protection and management measures', and at the regional level as laid out in article 6 which indicates that 'A European Geopark must work within the European Geopark Network to further the network's construction and cohesion' (Frey et al., 2001a). This network of four partners, further elaborated in the promotion and dissemination literature they produced, their vision as to what such collaborative efforts were to entail (Frey et al., 2001b; McKeever and Zouros, 2005; Zouros, 2004). One aim was to share ideas, with a recognition that different perspectives would exist, but the options taken by each geopark moved towards a common goal of providing developmental solutions. Additionally, there was a belief that the

most effective pathway to developing such solutions, was through the expansion of the group to devise what they termed 'a European Community of Regions with a sustainable future' (Martini and Zouros, 2001). Particularly during this period of consolidation and expansion of the geopark model, regional European Union funded projects played a significant role in facilitating the opportunity for locales to travel and meet up together. Moving beyond the initial Leader IIC project that brought together the founding four sites, a second Leader IIC project secured funding and provided the platform to raised awareness of the first formal connection between UNESCO and the EGN (UNESCO interview, 2009).

The organization and framing of formal meeting events are articulated in the articles, guidelines and rules of operation of the EGN which are a guiding policy expression for the structure of the organization. These were most recently updated in the spring of 2015, in preparation of transformation of the EGN into a not-for-profit organization, and the geoparks model into a formal programme of UNESCO (EGN, 2015b). The two organizational assemblies that were created when the European Geoparks Network first emerged in 2000, to manage and support the everyday running of the network are termed as the Coordination Committee (CC) and the Advisory Committee (AC). The association website describes that these operational features were formed as an expression of the transparent and democratic ethos that is a driving force behind the network's creation (EGN, 2011). The CC is outlined as being the only decision making body of the network at a regional or network level (EGN, 2011). Individual geoparks internally have their own management systems, which are guided by the composition and priorities of

their partnership or consortium. A more detailed analysis of those internal systems will be provided in the three chapters concerning geopark case studies.

3.2 - The Coordination Committee (CC)

The CC meets for a minimum of two times each year, and each geopark is obliged to send two representatives to those meetings. One person is expected to be an earth scientist with an understanding of geological heritage safeguarding and / or promotion. The second person should be either the geopark manager or coordinator, or an employee of the geopark who specializes in issues regarding development, community engagement or sustainable tourism. The venue for those meetings circulates around the network, with the hosting geopark self-nominating and the selection confirmed by the CC.

In the initial phase of the network, funding from regional European Commission programmes often subsidized the costs of mobility and hosting such meetings and encouraged full participation in each. Equally, the numbers involved meant that discussions could be physically staged around a single large table, or at least a small room with individual exchanges happening in close proximity to each other. With the expansion of the network of geoparks, and the fluctuating presence of funding to facilitate individual travel costs, it has meant that some geopark participants have raised concerns about the expense and even the necessity to continue to attend these face-to-face meetings.

By the end of 2015, the European network had grown to 69 individual geoparks. Consequently each meeting has now been transformed into something

considerably more than a round table event. As many geoparks are placed in a rural setting, one consequence is that not every geopark has the capacity or inclination to stage a CC meeting. For instance with the number of attendees who need to stay for at least 3 nights, some quite sizable accommodation is required, and that type of hotel capacity is not available to a number of the geoparks. Thus the sharing of hosting around a small grouping that prevailed during the first few years of the network, is no longer a viable option.

The objectives of the CC meetings are formally described as being a platform to deliberate on the growth of the network, including the examination of the dossiers for new geopark applicants as well as the revalidation assessments of existing geoparks. Other matters, covered during the meetings include discussions around collaborative projects that often seek external funding and activities involving clusters of EGN members internally within the network. The latter of these is expressed through small working groups, who are working together often on a common project or bidding opportunity. There are also a number of thematic network clusters. These may be devised around an earth sciences informed theme (such as volcanic structures, coastal landscapes, caves and other Karstic features) or a cultural heritage theme (such as food, intangible heritage). These different groupings are an additional way of striving to ensure collaboration and exchange around the network, which is viewed as a way of consolidating and strengthening the organization (EGN, 2011).

3.3 - The Advisory Committee (AC)

The second significant internal feature of the network is the advisory committee (AC). This is comprised of a combination of representatives who specialize in either geological heritage and its promotion, or aspects of sustainable development. The grouping consists of a number of elected and reserved seats. In acknowledgment of the pioneering grouping of four original geopark locations and their long experience in developing the EGN, three seats are held for Guy Martini, Nickolas Zouros and Andreas Schüller. A single seat is also reserved for a representative from each of the supporting advisory agencies, UNESCO, IUCN and IUGS. Two places are then given to the EGN coordinator and vice-coordinator, who have in turn been elected by the CC. Then a further four seats are given to members of geoparks in the CC as elected by the full representation of the CC. The individuals in this last category are each given two year terms and there is an effort to balance experience and contribution to the network, with an even geographical distribution across the currently 69 geopark locations (as of 2016).

The mandate for the AC is to debate and make recommendations regarding the strategic direction of the EGN, and the validation process for new geopark applicants plus re-validation for geoparks that are already accepted into the network. This two tiered approach of a large decision making body (the CC), and a smaller advisory structure (the AC), is similar to the approach taken by UNESCO itself. In that organization, an executive board of 58 representatives meet biannually and prepare the documentation and advice around which the General Assembly of all member states in UNESCO, held biennially, vote upon.
In both of those settings, the advice of the initial expert grouping (Executive Board in the case of UNESCO, and the AC in the case of the European Geoparks Network)

is rarely opposed or overturned (EGN interview, 2015). A number of geoparkians interviewed, have additionally made the point that the CC meetings are essentially a setting to rubber stamp decisions that are made in the AC, although it is always stressed in the main communication tools of the network (the website and EGN magazine), that the CC is the only decision making body.

Part of the present relationship between the AC and the CC can be identified as being a symptom of the breadth and rapid expansion of the EGN. Whereby once there could be the opportunity for more lively exchanges around the CC meeting tables, when the grouping was able to conduct those debates whilst sitting in close proximity and amongst peers who through joining the network at approximately the same time, could be perceived as having similar experience in the field, whilst the current CC has extended to the extent that it is impractical to seek the views and perspectives of each geopark member. Furthermore, there is an often self-diagnosed recognition of newcomers to the model and the network, as discreet from a core grouping of the longstanding original geopark members who came together around common European Union projects, and could exchange views from closer across the table than is possible today (EGN interview, 2015).

3.4 - Rise of the National Committees

The expansion of the network has both incorporated new sites in countries that hadn't previously been represented, as well as adding further locations within states that did have representation within the EGN previously. For example as of 2015, Germany is home to 5 geoparks, UK hosts 7 geoparks, and Spain including its

autonomous regions has 11 geoparks (EGN, 2017b). This circumstance has prompted the gradual development of national forums or committees where practical and strategic decisions are shared amongst those national groups of geoparks. This process started off in an ad hoc and voluntary basis, but has now shifted to a situation where national committees are actively encouraged. Particularly since the incorporation of the geoparks model inside of a formal programme of UNESCO, these fora have often involved the participation or support of their respective national UNESCO commissions.

The national committee forums provide a separate opportunity for the geoparks from one country to meet outside of the European network events. These occasions provide a smaller stage for the geopark members to come together and get to hear more directly about the challenges, opportunities and perspectives each location has in response to the model. As each geopark in these national committees also shares more common legislative, political and often cultural elements that influence their day to day operational running, the meetings offer another chance for them to come towards a cohesive understanding of the model. The scale and informality of these meetings also allows the national groupings to interact in a closer more collegiate manner.

Through my attendance at Irish geoparks forums in 2012 and 2013, I observed how the agendas indicated that these events were being used to raise further awareness of the model outside of the immediate network and were open to the general public. In the Irish case, attendees mostly came from new and aspiring geopark consortia, and the forum brought presentations and discussions to

support and encourage those interested individuals and organizations. However each national forum is organized internally and the meetings are structured according to their own national guidelines. The UK national committee for instance follows a similar format to the Irish geoparks forum, whereby the first day is a closed meeting for existing national member geoparks and the second day is opened out to invited participants from aspiring geoparks (Marble Arch Caves interview, 2016).

Figure 5 - Training and guidance at national level for aspiring and existing geopark, in this case during Irish geoparks forum (Jonathan Karkut, October 2013)

Another aspect the national forums contribute towards is the reaching of a collective response to voting during the EGN meetings. That is now a necessary requirement particularly if there are more than 5 geoparks located in a country, since the rules of operation as most recently reworked in 2015, outline voting rights at the CC being limited to 10 votes per country. Therefore if there are more

than 5 geoparks such as is the case in a number of countries, they are expected to agree internally how to distribute those 10 votes across the national members (EGN, 2015b). These elements suggest that the national forums are conducted predominantly as an administrative and technical platform for existing members. They are used to present the rules and guidelines of the model as laid out by the CC of EGN, to parties that are already familiar with the concept and have taken some initial actions to move towards creating their own geopark. The function of communicating with the general public is principally the responsibility of each individual geopark. Although some awareness raising towards relevant public agencies, such as organizations relating to conservation, or governmental departments, is channeled through national geopark committees (Marble Arch Caves interview, 2017b) and at a multi-national level through the UNESCO earth sciences section (GGN, 2017; UNESCO, 2016b)

Moreover these meetings are a further tool that is aimed at working towards generating what Guy Martini and Nickolas Zouros described as an 'effective network' responding to shared themes, as opposed to each site working on an individual project and presenting the results to the rest of the network (Martini and Zouros, 2001). That ethos and reaction to a perception that many collaborative networks merely operate along narrow individual lines, has been a powerful driving force both in helping to expand the network, whilst also working to maintain a close coherence to its guiding charter.

3.5 - Regional Geoparks Networks

Although the EGN was the first regional network formed, from its earliest days the concept has been shared amongst audiences in Asia (Barettino et al., 2000; Burek and Prosser, 2008; Dingwall, 2000; Eder, 2004). Most significantly, enthusiasm for the approach was emerging in China (UNESCO, 1996). Thanks to financial and technical support from the central Ministry for Land and Resources in Beijing, the model was applied across a range of provinces and landscapes (Xun and Milly, 2002). At the start of 2004 a further meeting was coordinated in Paris by UNESCO department of Earth Sciences. On the agenda was the proposal to create a global network of geoparks under the auspices of UNESCO. The 17 European and 8 Chinese geoparks that had been established by that time, were accepted as the inaugural members of Global Geoparks Network (Jones, 2008). The decision was also made to formulate a set of operational guidelines for subsequent applicants to the new global network (EGN, 2011). These guidelines prevailed until 2015 when the network eventually gained a formalized relationship with UNESCO (UNESCO, 2015; UK National Commission for UNESCO, 2017).

The two clusters of geoparks in Europe and Eastern Asia, continued to be the primary focal points of the global model from 2004 onwards, with a global geoparks conference taking place biennially. That public event beginning in Beijing 2004, was staged in either Asia or Europe for the subsequent decade. The GGN conference has been the most significant formal platform for geoparks to share experiences and considerations as to how the model is evolving outside of the regions that those geoparks are more directly familiar with. It is also the most prominent stage from which to raise wider awareness and popularize the

approach beyond audiences already familiar or coming from within the existing network (GGN, 2014).

Through attending, presenting papers and conducting participant observation at the last three of GGN conferences in 2010 Langkawi, Malaysia; 2012 Shimabara, Japan; 2014 St. John, Canada, it has been possible to discern how these events are organized, utilized and the roles that are enacted by differing representatives. They provided the clearest opportunity to familiarize myself with a key moment at which participants from the network get to interact directly with each other. Those conferences also served as a platform where geoparkians had the opportunity to be introduced to my research and interests in geoparks and their regional networks.

3.6 - GGN conference 2010, Langkawi - MALAYSIA

The event held in the Langkawi islands of Malaysia during the spring of 2010, was the first GGN conference to be hosted outside of China or Europe. The timing of the conference was significant, as geoparks around Asia were beginning to emerge from countries such as Iran, Indonesia, Japan, Korea and Vietnam. The Langkawi geopark itself was accepted into the GGN in 2007. Out of the 423 delegates that attended the great majority unsurprisingly came from East and South-East Asia. However, one or two attendees from many of the European geoparks did manage to attend, with a further few delegates from Latin America and Africa.

As the Asia-Pacific geopark network and individual geoparks are guided by the European geoparks charter and are expected to closely mirror many aspects of the approach adopted in Europe, it is not surprising that the global conference followed a similar structure to the events hosted by the European Geoparks Network. The day before the conference is dedicated to a meeting of the coordinating committee. In this case it being for the GGN – the EGN similarly stages a closed geopark members only session of the coordination committee the day before the public conference.

Staged at the Awana Porto Malai resort hotel on the island of Langkawi, the event drew attention through the hosting of what the organizers described as a 'geopark fair'. This consisted of stalls or stands erected by individual geopark localities in a similar fashion to those presented at trade fairs. Information materials, maps, leaflets and posters were shown and handed out. The stands were drawn mainly from existing geopark sites, with an additional few from aspiring geoparks. With the fair being conducted outside, in a hot but sheltered climate, there was a healthy attendance of people circulating around. The majority of those viewing the fair were either attending the GGN conference or staying in the resort as hotel guests. The conversations around the fair were more of a nature of friendly and interested light exchanges inquiring where the geopark attendee came from and what the theme or attractions were in their geopark. As opposed to an environment of hard trade or focused business discussions, as one might see at a more specific tourism trade fairs such as ITB Berlin or WTM in London.

The geopark fair opening ceremony was also conducted outside, and again matching a format observed at European Geoparks Network conferences. It began with short introductory and congratulatory speeches from UNESCO earth sciences figureheads, Malaysian conference organizing figures and European and Global geoparks dignitaries from the core advisory committee grouping. This was then followed by a 'cultural' show involving local dancing and singing, largely performed by school children. The show seemed to be specifically about entertaining the conference attendees, containing little that appeared to be relating directly to the Langkawi geopark or about island traditions more generally.

Bookending the main conference sessions on days 2 and 5 (out of a 6 day event) parallel field visits were organized to introduce and present the key geopark sites. These were divided up into what the conference organisers described as either Geo-landscape exploration or Socio-cultural exploration. The trips were conducted using coaches or boats, and interpretation or guiding was lightly presented. This allowed those attending to chat, mingle and generate a congenial atmosphere. Particularly as the islands lean heavily towards tourism, the trips made the group feel akin to that of conference tourists. Particularly amongst the European delegates, some knew each other beforehand from previous meetings and conferences. However, the relaxed environment and delivery of information appeared to ensure that any lines or separation between geopark insiders and outsiders, were not overt or prominent at least in this public setting.

The three days of public conference moved inside to air conditioned halls and rooms connected with the resort. An opening ceremony again consisted of introductory and congratulatory speeches from UNESCO earth sciences figureheads, Malaysian conference organizing figures and European and Global geoparks dignitaries. But on this occasion the status of the geoparks movement in the region was highlighted by a brief introduction from a member of the Malaysian royal family, Tunku Puterilntan Safinaz, who is the royal patron of Langkawi geopark (Langkawi, 2016).

During each of the conference days, three parallel sessions were conducted following a format of 15-20 minutes for presentation (predominantly utilizing powerpoint) and then a few minutes for brief questions. In academic terms, the presentations were generally descriptive and reporting specific circumstances at an individual geopark location. Although cross-cutting themes were often acknowledged, the limited amount of questioning or time provided for questions, hinted at an overall lack of interrogation or critique across those themes at least during the open sessions of this forum. The restricted connection made by geopark practitioners with theoretical and practical paradigms, is a theme that will be further addressed, in particular during the chapter that takes consideration of how policy issues are being tackled by the geoparks model.

The 4th GGN conference in Langkawi was directly facilitated by the organizing committee of the Langkawi geopark. That committee consists of a broad sweep of partner agencies, but most significant amongst these are the Langkawi Development Authority (LADA) and The National University of Malaysia locally

called, Universiti Kebangsaan Malaysia (UKM). The presence and influence of these two institutions influenced the decision to present additional sessions at the start and finish of each day. In the mornings an opportunity was provided for business meetings. These were introduced as follows:

'The conference organizer also provides rooms for various other business meetings including meeting for various regional geopark networks and for respective geoparks to start or to strengthen ties between one another. Signing of MoUs between two or more geoparks are encouraged during this session' (Langkawi, 2010).

Then after a full day of conference presentations, four parallel workshop sessions were staged in and around the main conference hall. These platforms were intended to allow for more open exchanges, debates and interaction around topics that were generally similar to the presentation sessions – for instance covering topics such as geopark governance, communications, marketing. But through operating via a more open format they were intended to encourage interchange involving those familiar or active within a specific geopark, as well as other administrators, policy makers and whichever general public had registered for the conference (Langkawi, 2010). Considering these were held at the end of long days of presentations, they were reasonably well attended with at least a dozen people usually in each session. Inside each workshop a facilitator and rapporteur then summarized the discussions. Those conclusions were in turn conveyed to the whole conference audience during a specific session conducted just prior to the closing ceremony on the sixth and final day of the event.

These workshop sessions provided an opportunity for more vibrant debates, set within a small roundtable setting – the type of setting in which the original European Geoparks Network meetings had been conducted (GGN interview, 2016). This was observed directly at the workshop I personally attended ('Geoparks in developing countries'), and also conveyed through the plenary workshop feedback session. Although by the time this report back to the general assembly occurred, the responses and energy from the conference floor were dwindling fast as events wound down at the end of a long and intensive event. The workshop format contrasted somewhat with the presentations that occurred throughout the conference days, which brief interjections limited through time restraints and almost always tied to powerpoint slides.

3.7 - GGN conference 2012, Shimabara - JAPAN

Having raised interest through the introduction of workshops, and emphasized certain points during the synopsis, there didn't appear to be any additional mechanism to bring those discussions and perspectives forward within the wider geoparks network. This was emphasized during the next GGN conference in 2012 held at Shimabara on the Japanese island of Kyushu, where the conference structure changed to only include a brief workshop session (GGN, 2012). Throughout the Shimabara 2012 GGN conference the recurring theme was around disaster preparedness and mitigation. That message was repeated by local political figures including MPs and provincial governors, with the emphasis on identifying the role and position Japanese geoparks were playing in keeping information and

awareness circulating. As well as individual papers on the theme, a separate 'Public forum of geopark and disaster prevention' was held (GGN, 2012). This took the form of a panel discussion with panelists being drawn from local geoparks, museums, governmental agencies and one European colleague from the advisory committee of the EGN.

Figure 6 - Typical geoparks fair scene, during 2012 GGN conference in Shimabara, Japan (Jonathan Karkut, May 2012)

Another strong theme of the 2012 conference, was the connection to schools and universities in the vicinity of geoparks in Japan. This manifested itself during the conference with performances and presentations on most of the conference days. Also schools were prominent stop off points for further displays and shows during the series of parallel field visits around the principle sites of Unzen geopark. The rationale behind this presence was to symbolize the role that education is considered to play within the geopark movement (GGN interview, 2016). Stressed

in keynote speeches and in printed and online documentation, the balance between the three geoparks components of conservation, education and sustainable development, is continuously reiterated.

Another aspect that came across robustly was the presence of a large number of volunteers and guides. There were both those enlisted to support and aid the running of the conference, but also a number came from other Japanese geoparks and acted as a demonstration of the civil society role in the practical functioning of geoparks throughout Japan. Due to the international audience, many were English speaking which allowed me the opportunity to engage in some conversations when time allowed. Through those brief exchanges it became apparent that their volunteering roles extended beyond just meeting, greeting and responding to questions relating to the conference. A number were active more widely in the running of the geopark and to a person, there was an emphasis in pride of their locality and the significance of the bridges between the landscapes and the manner in which human settlement was shaped there. The visibility of these individuals, sometimes described as 'geopark ambassadors' or the more generic term 'geoparkian' (anyone active inside an individual geopark), may be interpreted as being one way to express the significance placed in the bottom up and community driven approach that is also repeated at length during these conferences and other tools of communication utilized by the network.

Following the event in Shimabara, I maintained communications with several local guides and volunteers linking as friends on Facebook. The influence, functions and activities of the geoparks networks that are mediated through Facebook (Miller,

2011; Miller et al., 2016), will be covered in greater detail during the methodology chapter. One further feature of the GGN conferences that has been consistent across all of the events I have attended, has been the ceremonial format during plenary sessions used to acknowledging newly validated geoparks or those existing geoparks that have successfully seen their way through the four yearly revalidation process. The stage at these ceremonies is universally one of high energy, smiles, congratulations, photographs and positive emotion. In some ways this point in the conference reflects an outburst of relief as the processes of submitting for initial validation or moving through a revalidation phase demand a substantial amount of effort and coordination. The chapters on the individual geopark case studies will allow a closer observation and analysis of the preparation demanded to reach these ceremonial conference moments.

It is worth noting that although a few geoparks have failed in their quest to gain revalidation and received the unwelcome 'red card', from the point the EGN was formed in 2000, and the GGN in 2004, the networks have only ever grown in number and expanded into new territories. The ceremony and the presentation of the geopark stars on a global map highlight a congratulatory mood present in the conference halls, and emphasis on the continuing expansion and perceived success of the model. When the new geopark stars are inserted on to a revised global map, it is immediately apparent that there are two areas of concentration where the model has reached out and expanded – these are Europe and East Asia. The southern hemisphere, Middle East and North America are all regions that the model has until now seemingly had limited impact (GGN interview, 2016; English Riviera interview, 2012). The Global Geoparks Network conferences, in particular

have been one forum where it has been possible to examine why this has been the case. From listening to presentations, and talking with attendees, it is apparent that awareness of the geoparks model and networks is broadly speaking a global phenomenon. But what changes from region to region is the impact that awareness has, and also the specific political, economic, cultural, civil society or other organizational aspects that may limit or encourage the model to be adopted.

3.8 - Global Geoparks Network in North America

The international organisations that have a presence on the geoparks advisory committee (AC), namely UNESCO, IUCN and IUGS, all have a global membership and reach. They are particularly prominent in North America. The absence of geoparks, particularly in the USA, therefore leads to considerations as to what facets support or hinder further proliferation of the model. Responses to such questions have been possible as the GGN conferences have been consistently attended by interested agents, who have subsequently shown to be not only representing one individual aspiring geopark location, but rather act as points to understanding and disseminating the approach to wider local audiences back in their home countries.

The method of attending short conference presentations, then following this up with coffee or meal break conversations, yielded useful information and perspectives concerning both Canada and USA. Furthermore, my consistent attendance at an ongoing number of conferences, allowed those relationships to continue at subsequent events. These additionally highlighted that although the

GGN conference is the global showcase event, it is also effective for aspiring regions to attend, be seen and to connect at the EGN conferences. These are held more regularly (annually in September) and are conducted on a slightly smaller scale, but following a similar organizational format.

Following the complementary activities at the GGN and EGN conferences, it was therefore possible to establish that representatives from the geological survey of Canada and the New Brunswick Museum have been considering the concept of geoparks since the very first Global Geoparks Network conference that took place in 2004 when it was hosted in Beijing (Nowlan et al., 2010; Nowlan, 2011). From that first event, what the Canadian presence pointed towards was that although there was an acknowledged enthusiasm for the model, there was equally a desire not to rush headlong into creating their own geoparks, but to stand back and reflect on how that model could be adapted to fit with the circumstances in Canada regarding conservation, development, education and recreation(Canadian Geoparks interview, 2012a).

Colleagues in the Canadian Geoparks Network, explained those circumstances as being based strongly around the concept of the 'park', especially at provincial and national levels (Canadian Geoparks interview, 2012a). In Canada, those parks are often located in wilderness or un-developed land and represent geographically large areas, which have significant layers of protection, where functions relating to education and tourism are often present, but as a lesser priority (Nowlan et al., 2010). The designation of park areas is also firmly a role conducted by government bodies (Nowlan, 2011; Canadian Geoparks interview, 2012b).

The emphasis in the geoparks model of a bottom up, community-driven approach, was therefore an original and attractive prospect to the Canadian audience at the geoparks network conferences (Canadian Geoparks interview, 2014). Although moving to partially unpack and consider what 'bottom-up' may mean in some Canadian geopark contexts, the term remained set in the dichotomy with a perceived top down governmental role as framed by the initial authors of the geopark model (Martini, 2000; Martini and Zouros, 2001).

One case that was highlighted to demonstrate this approach was the way in which the spectacular fossil find of 'Scotty' the Tyrannosaurus Rex, had been curated and the discovery site developed (Canadian Geoparks interview, 2014). The initial find was made near the small town of Eastend, by a local high school teacher, who had been assisting a team of geologists from the Royal Saskatchewan Museum in Regina (TOKARYK, 1997). That local connection with the find was maintained, and eventually a purpose built community and visitor centre was created to house the near complete skeleton as well as exhibits and galleries that relate to other aspects of the natural, cultural and geological heritage from the region (Royal Saskatchewan Museum, 2016). A key aspect of this case was that rather than being shipped to the principle site of the Royal Saskatchewan Museum in Regina, some 380km away, the find was presented almost in situ with a bespoke facility constructed. This emphasizes the location as it may be seen today, and also its connection with the present day communities in Eastend.

Aware that this form of engagement with geoheritage was present in a number of locations across the country, in 2009 the Canadian attendees decided that it would be most appropriate to pool resources and devise a national committee for geoparks even before a geopark had been created in the country (Canadian Geoparks interview, 2012a). Although this grouping was constituted through the Canadian Federation of Earth Sciences, its higher-level structure was justified as it allowed consistency when establishing guidelines for the creation of potential geoparks, and when informing or encouraging new sites about the geoparks network. With these responses although the terminology of 'bottom-up' was not replaced, the consideration of what form of partnership assemblages may fit the institutional and policy settings in Canada were evidently adjusted at least on a countrywide scale to introduce the geoparks model.

As well as promoting and supporting applications from aspiring Canadian geoparks and acting as an intermediary between geopark locations and the UNESCO Earth Sciences department, the committee also set out a goal to liaise and cooperate with colleagues in the United States (Nowlan, 2011). The objective of this cooperation being to develop a consistent strategy and approach to geoparks, and eventually to form a North American regional geopark network (Canadian Geoparks interview, 2012). To support this cooperation, a colleague from the United States Geopark Committee, is given an ex officio position in the Canadian Geoparks Committee (Nowlan, 2011). Additionally, the national committee was set within a background which could point to a long history connecting with the earth sciences and a significant linkage to the extractive industries (Canadian Geoparks interview, 2012a). Mining heritage in Canada covers numerous resources and

diverse geographical locations, from the first Chlondike gold rush, to more recent hydrocarbon and mineral discoveries. The relationship that those interests have with the geoheritage, geoconservation and educational messages channeled through the geoparks model, are yet to be fully aired let alone resolved (Canadian Geoparks interview, 2014). This is in contrast with the growing debate and literature that addresses the complex and fluid connections between UNESCO world heritage sites with proximity to extractive industries (Turner, 2012; UNEP-WCMC, 2013; Wilson and Stammler, 2016; Upson and Clarke, 2015; UNESCO World Heritage Centre, 2016).

On the basis of this national setting, a number of locations were identified primarily on the basis of their significant geological heritage. However, rather than encouraging untouched sites, meetings and forums were conducted within destinations that had already become active locally in conserving or raising awareness of their geological heritage, and additionally were situated where further economic development was considered desirable (Canadian Geoparks interview, 2012a). This allowed for a spread of expressions of interest from the far corners of the country, in Yukon, British Colombia, Ontario, Quebec and Newfoundland. These introductory sessions were as far as the national committee took the initiative, for the time being. If a locality was motivated to generate an active geopark project, it was left for the local community, the consortia they devised and the management structure they created, to then take the project forward and bid to enter the global geoparks network (Canadian Geoparks interview, 2012b).

By 2015, two geopark locations have taken on this challenge and moved their projects forwards. The first is located in the south-east province of New Brunswick, in and around the city of Saint John and the Bay of Fundy (Miller and Buhay, 2014). The project became known as the Stonehammer geopark and in 2010 it was successful in applying to join the GGN to become the first geopark in North America. The second geopark initiative from Tumbler Ridge in British Columbia, followed up with a successful application to the GGN in 2014 (UNESCO, 2016a). One feature that was prominent in the strategy taken by the Stonehammer consortium, is that as well as having a strong motivation to present and sustain the local landscapes and heritage around Saint John and its hinterland, the grouping ensured that they were well informed about the geoparks model and how other geoparks interpreted it in their local circumstances. This was achieved in part by attending and presenting at regional conferences such as the EGN, and also through visiting other existing geoparks through bi-lateral arrangement (Miller and Buhay, 2014). Furthermore, there was a consistency regarding which individuals travelled on fact-finding missions on behalf of Stonehammer geopark project, and a consistency in those individuals sharing their findings amongst the wider consortium grouping (Canadian Geoparks interview, 2012b).

A further aspect of the approach taken by the New Brunswick based group, was the maintaining of close communications with the head of the Canadian geoparks committee, and with the European Geoparks Network advisory committee. This served to relay their progress, how they were interpreting the model and to ensure that as wide a range of responses and comments were received (Canadian Geoparks interview, 2012b). The contacts established and platforms attended

within the EGN and GGN, were one end of the equation for Stonehammer. The other was an understanding of the social and political setting within Saint John and New Brunswick. This informed the type of management structure that it was considered would fit most effectively to the conditions on the ground in Canada. For instance, it was important to be familiar with the long established Canadian parks system, to ensure that misunderstandings (such as accusations that geoparks were duplicating functions of a perfectly viable existing parks model) did not arise which could in turn lead to obstruction or counter political lobbying (Canadian Geoparks interview, 2012a).

Equally, the pace of the Stonehammer application was significant. Rather than rushing into complete an application as quickly as possible, the grouping ensured that long-term resources, funding and commitment to the aspiring geopark were secured. The partnership of organisations in their consortium, including the prominent New Brunswick Museum, allowed outreach work to be conducted that meant broad awareness, understanding of its objectives and support for the proposed geopark was also obtained across a range of local communities and stakeholders (Miller and Buhay, 2014).

In allowing the project concept to be embedded at a more considered pace, there were more opportunities to understand and incorporate a more considered understanding of the policy and funding streams that would sustain their interpretation of a geopark. By the time the application was finally submitted by Stonehammer, the consortium had also taken the opportunity to be part of a maturing relationship with the national UNESCO commission (Canadian Geoparks

interview, 2014). Through awareness of how the connection between individual geopark projects and their respective national UNESCO commissions had in some cases already stalled or soured the political environment, Stonehammer ensured that the office in Ottawa was cognizant of how the geopark model was being applied in Canada (Canadian Geoparks interview, 2012b).

The lengthy procedures taken by Canadian 'geoparkians', emphasise the range and balance of efforts that are required to transpose what is essentially a practical application of a policy model, into a policy environment that is notably different from that of where the model emerged – i.e. in countries of the European Union. The form of globetrotting between events that are staged on a different continent, such as the EGN and GGN conferences, and the meetings and activities that have taken place in various cities and provinces and across a breadth of agencies around Canada, highlight the need for extensive resources to be available if an aspiring geopark project is to arrive at a successful conclusion, to what in effect is only the beginning of the geopark's connection within the GGN (UNESCO interview, 2014). Correspondingly, the aspiring and existing geopark consortia, are required to demonstrate a nuanced understanding not only how the geopark model is presented generically, but also how it has to be negotiated and adapted to fit local conditions in their own geopark destination.

The organization of EGN and GGN conferences in particular, places a strong emphasis on consolidating the central guidelines and working via the keynote speakers to deliver a clarity and consistency to those instructions. The subsequent sessions, panels and presentations predominantly stress what individual geoparks

are doing in response to the articles and statute of the network. Rarely, is there a direct opportunity to hear about the policy challenges faced when a geopark is attempting to transpose the model across to a specific local context. Certainly those type of discussions and exchanges take place, but are more often negotiated on the fringes of the conference and meetings.

With geology, which is often described as being a 'field' science (Baker, 2013; Frodeman, 2014) being the starting point for the model, it is not surprising that field visits are a further prerequisite in the structure of the geoparks conferences. With the longer time available, and often lengthy transfers by bus or other transport during those trips, more complex and in depth reflections of the model are shared between delegates. Particularly, though not exclusively, at GGN events it is possible to hear about some of the considerations as to what may be holding back the development of geoparks in some regions, or allowing them to flourish in others. For instance, the circumstances in which the model is slowly but steadily emerging in Canada, can be contrasted with the way in which efforts have until now been stalled during attempts to encourage the emergence of geoparks in the USA.

3.9 - Geoparks in the USA

As suggested in the structure of the Canadian Geoparks Committee, an open and collaborative relationship exists between colleagues in the USA and Canada (Canadian Geoparks interview, 2014). The contacts involved in these linkages come predominantly from governmental and professional organisations, such as

the respective geological societies in the two countries. On the Canadian side, because two geoparks have already emerged that have been recognized by UNESCO and the GGN, and also as a growing number of aspiring geoparks are emerging all across the country, there has been a corresponding growth in the number of members who have direct practical experience of running or coordinating day to day aspects inside of a geopark (UNESCO interview, 2014). This contrasts markedly with the situation in the United States. As of 2016, no geoparks have been organized in country even though awareness of the model has been present for as long as that in Canada (GGN, 2017).

Through its role as a national professional membership body (which is also open to non-US residents), that draws together a diverse sweep of connections to the earth sciences, the Geological Society of America (GSA) was chosen as the geoparks point of contact for the United States (Calnan et al., 2010). At present the position of the GSA is essentially one of a mediator filtering and conveying their view of the geoparks model to audiences with the national parks service, the US UNESCO national commission and other relevant governmental and private parties (North American Geoparks interview, 2014). A representative from the GSA continues to attend many of the principle geoparks conferences in order to maintain an updated understanding of the model as conveyed through those formal events. Information and a perspective on the approach and its networks had also been generated whilst that same colleague was representing the IUGS on the geoparks advisory committee for the period 2010 - 2014. This brought the nascent American network in direct contact with the core advisory body of the model. This provided an opportunity to gain an appreciation of how that body functioned – how decisions

were arrived at, which figures and perspectives dominated and the areas where some degree of flexibility exist or where more rigid stances were taken (North American Geoparks interview, 2012).

Following the delivery of a series of presentations by the GSA during Global and European Geopark Network conferences between 2010 to 2014, it became apparent that one of the crucial differences from the position in Canada emerged in the relationships conducted between the United States federal government and UNESCO, and also via the positioning of the US National Parks Service with the relatively new concept of geoparks (North American Geoparks interview, 2014). Continuing my questioning after those brief summary presentation slides, the field trips, tea and meal breaks, and ongoing communications via social media platforms, allowed for the opportunity to conduct semi-structured interviews with the speaker and expand upon some of the points raised.

Across those communications it was conveyed that the delivery of the geopark concept on the ground in the United States, was indeed caught in the middle of the often fraught political relationship the US federal government has with UNESCO (North American Geoparks interview, 2012; Meskell, 2014). Although geoparks were only formally voted and recognized as part of a full UNESCO programme in 2015, as linkages in the USA were made through national and international agencies, the perception was that is was another initiative formulated through the United Nations. This created doubts at governmental levels (more specifically in the US national commission for UNESCO) as to what this new model brought beyond the existing World Heritage and Man and Biosphere programmes (North

American Geoparks interview, 2014). What would the administrative burden be in backing the programme in the USA and who would be responsible for the administration and reporting? Questions regarding its budget were a further concern. How was the programme meant to be funded in the United States of America? (North American Geoparks interview, 2014).

Another prominent stakeholder involved in the debates around the establishment of American geoparks, was the US National Parks Service. The perspective delivered by that agency in essence stated that many of the iconic geological sites, including Yosemite, Grand Canyon, Yellowstone, were already recognized by UNESCO through world heritage listing. This provided high visibility and status. In terms of tourism development, the majority of those sites were highly visited and their main challenge was considered to be in managing and not being 'overrun' by tourists, rather than seeking to generate further visitation (North American Geoparks interview, 2012). Consequently the representation delivered through formal channels, showing geoparks consisting of three equal pillars of conservation, education and development, was considered by the Parks service as not delivering anything new or fresh. In the view of that agency, concerns of conservation and development were already covered through the existing protective models, and the geoparks approach was superfluous (North American Geoparks interview, 2012).

However, the ongoing supportive stance towards geoparks as seen in position papers and other public statements from the Geological Society of America (GSA) and to a lesser extend in the United States Geological Survey, hint at the often

challenging and complex explanation as to what geoparks are, how they operate and for what benefits. I have lost count of the speakers or documents that begin with the awkward and almost apologetic statement, “Geoparks aren’t just about geology…”. They do not lend themselves to a simple headline description. Instead they require patient listening and a nuanced understanding as to how the generic description of the model may apply to specific local circumstances (English Riviera interview, 2014; Marble Arch Caves interview, 2017b).

Staff from the GSA in particular have taken the opportunity to engage with the model through presenting and listening at events such as GGN and EGN conferences, where numerous interpretations or adaptations of the model are outlined. That consistent and long term engagement with the network has allowed it to formulate potentially effective lines of communication and delivery of useful training methods for community stakeholders that find out and are enthused about geoparks. But where a similar situation in Canada was then further supported by national or provincial public sector agencies, in the United States there are gaps that still need to be bridged before the model can fully emerge (North American Geoparks interview, 2014; Canadian Geoparks interview, 2014).

The perspectives generated and interpretations of the model that have helped geoparks become embedded in Canada and seen it progress much more slowly in USA, are representative of the challenges that exist even when a vibrant platform to disseminate knowledge of geoparks is present in the form of the EGN and GGN conferences and other training events. One facet of the growing number of sites that are formally acknowledged each year as UNESCO global geoparks, is that

whereas formerly all participants could sit around a small cluster of tables together, the scale of those events now involves less direct engagement in the Coordination Committee (EGN interview, 2015). Particularly during the process of formalizing the model as part of an official UNESCO programme, the function of national geopark committees or forums expanded. Those national groupings acted to bring clusters of geoparks closer to present a more coherent line of communication when engaging with UNESCO national commissions or other governmental agencies (Marble Arch Caves interview, 2015; English Riviera interview, 2014).

The examples and dialogues presented in this chapter, which are negotiated around the official geoparks events, provide some insights concerning how the Global Geoparks Network seeks to continue and expand its coherent and homogenized 'brand' vision (McKeever et al., 2010) as to how a geopark may be formed and maintained. But this thesis is equally concerned with how individual geopark sites and their associated consortia of partners read the model as it sits within local circumstances and policy priorities. The following chapter therefore introduces the methods by which I approached this task and in particular how I sought to weave together an extensive period of engagement with geoparkians and the geoparks model through a mixture of discontinuous but direct face-to-face exchanges along with alternative online or digital communications (Marcus, 2005; Hammersley and Atkinson, 2007; Miller et al., 2016).

Chapter 4 – Methodology for the 'field' flowing from geosites to an online community

4.1 - Introduction

This chapter is dedicated to introducing the issues surrounding the methods that were employed to generate and facilitate this research. As will become explicit through the chapter, as may be anticipated with a policy 'community' (Wedel et al., 2005; Mosse, 2006) being my research focus, I have not followed the route of a more traditional ethnography in situating my fieldwork within a single locality over a continuous extended period of time (Hammersley and Atkinson, 2007). Instead I have to provide rather more explanation and justifications for the decisions I came to regarding the methodology I eventually chose. These are laid out in the four sections that ensue.

Having introduced my personal biography and foundation to conducting this research at the very beginning of this thesis, I start this chapter by making an overview of the implications and issues that open up when the ethnographic method has to adapt to following the trail of a policy community, in this case that of the UNESCO global geoparks.

Secondly I have presented the more recent arrival to this research, as it has followed an earlier phase of investigation during which I initially made contact with a great many of my informants. I explain too the rationale behind keeping the

identities of those informants anonymous, and in turn lay out a brief descriptive biographical detail for each principle character.

Thirdly, I explain the combination of methods that I eventually arrive at. Significantly I place how my methodology is particularly informed by the discipline of Science Technology and Society (STS) as it has utilised the toolkit of practices (Law, 2016) described as Actor Network Theory (ANT). A central argument of the methods adopted by STS through ANT, is that the conceptual theory and method cannot be disaggregated but are 'all part of the same weave' (Law, 2016). The extent and flow of my 'field' in this fieldwork is explained and also how in part it is derived from 'following the actors' (Latour, 1987), as I have engaged with them. It therefore highlights how the method is both multi-sited (Marcus, 2005) and situated both offline and online.

Expanding upon this last point, the fourth and final section of the chapter provides an opportunity to outline how the growing influence of online settings for social and community interactions (Hine, 2015), are being responded to by the social sciences and the adapted methods that are starting to be accepted in the mainstream of anthropology (Horst and Miller, 2013). More confident in the robust nature of data gathered online, I outline how this material helps bridge the staccato nature of my 'on the ground' fieldwork in the geoparks, and bring a form of triangulation (Hammersley, 2008) to the methods I have adopted.

4.2 - Challenges within an anthropological following of a policy trail

The previous chapter that brought an introduction to the geoparks model and policy community, highlights how the conducting of this ethnographic fieldwork brings a shift beyond a purely geographical setting (Wedel et al. 2005). The anthropology of policy provides an ideal perspective from which to shape fieldwork that relates and 'responds to the growing discomfort with traditional models of fieldwork in an era of globalization (Schwegler and Powell, 2008). Central to the debate of anthropology in the 20th Century manifestation of 'globalisation', have been George Marcus (1995), Akhil Gupta and Jim Ferguson (1997) who have outlined the limitations of 'place-based, single site model of fieldwork that discovers essential truths of a culture and demands that an ethnographer need only insert herself into a specific locale and plug away until she finds it' (Schwegler and Powell, 2008: 3).

Instead, the linkages and assemblages between networks of actors can be viewed as being productive areas for examination (Shore and Wright, 2011). Therefore, rather than conduct fieldwork located in the historically familiar setting of a geographically defined local community, I have identified (as framed in my biographical narrative) and placed myself in the context of a grouping that may be recognised in respect of its 'epistemological affinity, shared meanings and common interpretative tendencies' (Schwegler and Powell, 2008: 5). The geoparks network and its cohort of 'geoparkians' constitute a useful example of this form of policy community.

On the scale and level of an individual geopark, the community of interested parties or stakeholders are more likely to have regular contact and communication

with each other. However, even this depends on the size of the geopark territory (they range from as little as 100km^2 to several thousand km^2) and its individual management consortium. As presented in the introductory chapter, Geopark structures are devised according to the conditions of the local environment (political, economic and physical). Some may exist on a scale where more continuous communications can be conducted. Examples of such geoparks, are the English Riviera Geopark, and Geopark Shetland, which are both structured in management terms, around a single unitary council in the case of English Riviera, and a single Amenity Trust in the case of the Shetlands (English Riviera Geopark Organisation, 2007; Shetland Amenity Trust, 2017). Whilst as I have been made aware through presentations during the EGN conferences, other geoparks cover areas up to several thousand square kilometres and their management consortia incorporate numerous local and regional political structures, with public, private and non-governmental institutions involved. Geopark Harz-Braunschweiger Land-Ostfalen, and Bergstrasse-Odenwald, represent such complex structures, where face to face meetings across the whole consortium are less regular.

At the supranational level of the European Geoparks Network (EGN), there are two Coordination Committee (CC) round table meetings scheduled each year where each geopark is obliged to ensure two members of their consortium attend the discussions and decision making process. In addition there is an annual EGN conference, which acts as a further platform from which to consider geoparks strategy and policy (EGN, 2011). Members of those geopark policy communities, can therefore be seen to move between positions at a local, national and international level. Even if there is considerable exchange, as geopark communities

tend to consist of professionals and experts, they may still not necessarily live close to each other and may or may not socialise with each other. As a consequence, this community which sometimes refer to themselves as 'geoparkians', tend to remain fluid and mobile, coming together and associating for quite particular and often policy related reasons (Schwegler and Powell, 2008).

In terms of access to information and actors, for the anthropologist conducting research on and in this community, unless one is inside the consortium of an existing geopark, the Advisory Committee and Coordination Committee meetings are off limits. Such forums highlight the sense of confidentiality and political nature of policy (Schwegler, 2008). For the anthropologist, this poses some challenges when seeking to generate data through traditional methods such as participant observation. This position consequently guides the anthropologist to glean information regarding the actors involved and the respective committees, through other methods. For instance these could be through the more gradual building up of confidence in the ethnographer by committee members via contact in other sites and contexts. As the committees shape their agendas around a limited set of issues drawn from the policy issues around which geoparks are formed, there are often other sites where such issues are aired and considered. In those additional settings - which may for example be at the time of geopark conferences, or during face to face meetings in individual geoparks, - it is possible to gather opinion, perspective and a sense of the flow of agency around those stages for policy formulation.

4.3 - The familiar border between object and subject is crossed

An additional methodological feature that may be looked upon in a new light when seen through an ethnography of a policy community, are the boundaries and relationships between the anthropologist and their subject of study. That positioning and the locating of where the ethnographic field is deemed to be situated, had been relatively straight forward and often clearly defined in the traditional vision of ethnography (Hammersley and Atkinson, 2007). In that situation the field was geographically delineated and once a single, usually continuous session of deep immersion had taken place, the ethnographer returned to an equally clearly defined desk from behind which they could write up their fieldwork (Amit, 2000). But such a clear-cut setting has been under strain for some decades. When considering policy communities for instance, it is important to note that ethnographic study is connecting with actors who can be quite familiar with the assemblage of their institutions, or considered experts in their own right (Schwegler and Powell, 2008).

It is a familiar situation for anthropologists to be subject to the evaluations of their informants, but the added weight of their institutional setting brings a new dimension. The further political backing provided through aspects such as supporting documentation, research and legislative framing, often generates substantive forms of knowledge (Riles, 2006). Armed with that information, those subjects can in turn have the confidence to assess and evaluate our own observations or findings and make their own responses to that data (Schwegler and Powell, 2008). Furthermore, in the setting of the geoparks model, with new geopark projects emerging each year and the acceptance into the formal network

of several geoparks annually, plus the occasional dismissal from the network of geoparks that do not see their way through the revalidation process, that community is not static or constant either. This setting adds to the uncertainty of the placing between object and subject, and working with such expert informant 'geoparkians' becomes multi-layered and fluid. As a consequence, the ethnographer needs to consider all aspects of the relationship, as even 'frustrated attempts generate data because they reveal the implicit topography of power and influence in a specific political field' (Schwegler and Powell, 2008: 6). At the same time, certain frustrating and messy situations (Law, 2004) may provide a decisive hint as to how the anthropologist is considered by their interlocutors.

Figure 7 – Common areas of expertise lead to a blurring of the boundaries between 'object and subject' during field research (Sara Gentilini, September 2015)

There is an unfamiliarity even within widely travelled agents working inside extensive supra-governmental organisations as to what an ethnographic study that takes place outside of the traditional territory of traditional developing world societies is attempting to achieve (Schwegler, 2008). Beyond that questioning, there is also an expectation that the relationship will bring some form of knowledge reciprocity, or as Schwegler (2008: 14) expressed it, 'Quite simply, anthropologists do not arrive empty-handed, and much of the challenge of ethnographic field research among powerful actors is learning what, precisely, the anthropologist bring to the table'.

Even when arriving at the office of the most senior representatives, it is apparent, as Foucault (Foucault et al., 1991) most prominently stated, agency is not unidirectional. Particularly through my background within both earth and social sciences, exchanges with some geoparkians certainly reflect 'overlapping but distinct epistemologies of knowledge' (Schwegler and Powell, 2008). Growing out of such relationships, there is a repeated challenge to identify where to locate oneself in the field. With the consideration of access and mobility around a policy community, it is helpful to evolve a sense of collegiality which incorporates a 'sense of voluntary distance agreed upon by both or all sides' (Powell, 2008). Additionally it is important to manage an adequate critical distance, so as not to get too accustomed to constructs of 'common sense', thus allowing analysis of 'taken for grantedness' aspects of the policy process (Shore and Wright, 1997). Through an oscillation between these EMIC and ETIC positions (ibid), one retains

the opportunity to raise fundamental questions as to how in this case, geoparkians conceptualise their approach.

4.4 - Meet the Geoparkians: An ethnographer and his formation of informants

The research data for this thesis although beginning formally at the University of Roehampton in 2014, builds upon relationships and insights that begun soon after my first introduction to the model in 2008. During that initial period, I was involved in a phase of informal research and interaction with stakeholders from around the geoparks network at individual geopark locations and in the collective gathering of the geoparks network in their public conferences. As it emerged, the occasion of the 4th Global Geoparks conference, which was hosted by Langkawi global geopark in Malaysia from 9-14 April 2010, brought an opportunity to forge quite a different rapport with many of those attending.

The conference and short presentation had progressed without major incident and by the last scheduled day of the conference many delegates were starting to turn their thoughts to what for many would be a long journey home. Amongst those attending the conference were a number of Scandinavian geopark's staff and it was from within this group that the news was first broken to the conference attendees that Eyjafjallajökull volcano had erupted in Iceland. With somewhat ironic tones, it emerged that one delegate had been the PhD supervisor for a noted Icelandic volcanologist who was now the focus of significant media interest as the voice

explaining why the volcano had erupted and why this was of significance beyond Iceland.

The news of the eruption was immediately of interest at our venue since the great majority of the attendees had come from a geological background. As more detail started to emerge it became quickly apparent that the ash cloud emitted was already having an impact on flights to some of the destinations that delegates had been planning to get back to in the next day or two. But before anyone could board a plane back to Northern Europe one by one we started to receive emails and text messages from our airlines informing that our booked flights had been cancelled. In an instant the tyranny of distance or proximity (Latour, 1996) had been erased as an event some 11,000km away directly effected this remote conference whilst Reykjavik, less than 150km from the volcano itself remained mostly free from the impacts of the eruption (Lund and Benediktsson, 2011).

Many delegates were now stranded at the conference venue and forced to stay for an unplanned and extended period until the moment that flights were resumed and they were able to find and re-book a revised homeward journey. As all of us faced a similar situation, we were forced together by circumstances into a newly formed network. For the most part still in a positive frame of mind, this group started describing themselves as the 'volcano refugees'. Apart from retaining a near constant update on the status of the volcano in Iceland, the group of around twenty European 'volcano refugees' used the time to talk at length, often still about geoparks, and get to know and understand what being in the geopark network meant as viewed from different destinations and settings. As the days of delay

continued, the wider group broke off into smaller clusters often of 4-5 people based on whomever they had been sharing conversations and meals with, and took the opportunity to travel more extensively around the geopark in Langkawi, since during the conference the busy schedule meant travel around those sites had been restricted to one or two brief visits. I finally got to leave the GGN conference some ten days after the scheduled finish to the event.

That period as mutual short term 'volcano refugees' provided me with a serendipitous opportunity to informally hear a wide spread of voices and views from these 'geoparkians'. The shared experience allowed a degree of trust to build up, and meant that relationships could evolve more rapidly when I came to visit individual geopark sites for the relatively short periods of work I could conduct in that particular part of my 'field'. Although I generally prefaced conversations and meetings and gained consent with a reminder that I was 'conducting research for my PhD on geoparks', my access to individual geoparks and to the public side of geopark network conferences has never been a contested issue. However, until quite late on in my fieldwork - I shall introduce the extent of the 'field' in that work in the following section - I couldn't express to my informants exactly what direction this research was taking me. The general hope in the network as expressed by several interviewees early on (English Riviera interview, 2014) was that I might be contributing to the small body of knowledge that had started to accumulate concerning the economic value of a geopark to its locality (Farsani et al., 2011). I rapidly dispelled this notion and had to convey a line that didn't impress my informants so much, explaining that I belonged to the circumstance with my research where, 'an ethnographer often does not know what will be

involved, certainly not in any detail; even less, what the consequences are likely to be' (Hammersley and Atkinson, 2007: 210).

Once conducting more extended periods out in the case study locations, it became increasingly apparent that in questioning around local policies and the interpretation of the geopark policy, I was involved in sensitive exchanges about politics, funding and projects in each of the localities. As such developmental work has been a prominent component of my professional career, particularly in accessing and managing EU funded projects, I found myself operating with some of my informants on equivalent terms akin to some degree as the 'expert subjects who are neither natives nor colleagues, but stand as counterparts' described by Holmes and Marcus (2005: 248). I also noted the experiences of David Mosse in finding how 'Ethnographic description can be experienced as threatening to a professional (or epistemic) community formed around shared representations' (Mosse, 2011: 54). Consequently, I have made the decision to follow a common convention in ethnographies and make the personal communications with my informants anonymous, in order to protect their privacy and also so as not to risk harming the reputation of any informant. As I have a restricted pool of informants, I made them anonymous both in terms of their names and genders as presented in the thesis text. In order not to lose the context of those citations however, I have adopted the method of introducing those cited personal communications by means of a brief biographic line or two.

Profile of interviewees cited in 'personal communications'

English Riviera Geopark

Jane – She is in her forties and was born in the area, then after going to university worked abroad. She is familiar with a variety of cultural settings and is fluent in several European languages. Jane brings together practice of working in the private sector, but also in fulfilling interests and obligations with local public agencies and committees in the locality.

Peter – He is in his fifties and has lived in the area all his life. He has an environmental science degree and previously worked in a local conservation organisation. He is conscious of the demands to provide a balanced representation of geoparks, and to maintain a strong profile for the model in this locality. Demonstrating an equal commitment to conservation, educational, and developmental needs.

Abbey – She has worked in the education sector both in schools and with outreach to wider groups. She is in her late twenties and her two children are regular contributors to geopark activities. Generates highly original and creative expressions that allow the geopark to present a vision and understanding of the model that is not bound by methodological constraints.

Katla Geopark

Runa – She is in her thirties and trained as a geologist but has worked mostly in the public sector with conservation activities. Originally from a different region of Iceland, she has also lived abroad. Is committed and determined to ensure the

geopark overcomes the challenges that have been encountered in its early phases of development. Provides stability through continuity.

Njáll – He is on the cusp of retirement but continues to be active in conservation work and part-time with several higher education institutions in the country. He has extensive experience in drafting and contributing towards externally funded projects and is widely travelled and experienced through various EU programmes. Was present during the initial emergence of the geopark. Frustrated at the absence of long term employment and development prospects, moved to another job.

Erik – He trained as a geologist and now in his mid-forties has returned to geology through the geopark after several years away working in the tourism business. Came into the geopark to help turn around its fortunes in generating greater commitment to the project particularly through stronger linkages with central governmental offices/ministries.

Gunnar – He has lived all his life in southern Iceland and trained up locally as a physical geographer. He has a passion for local wildlife having grown up on a local farm. Currently working part-time to support the geopark, provide support in particular to bringing greater direct earth science experience to the geopark activities.

Marble Arch Caves Geopark

Shirley – She moved to the region more than a decade ago and has been working with the local council in the area of conservaton, which links to her degree gained

in environmental sciences. Offering significant practical and political knowledge to help navigate the geopark through complex operational demands and secure its status both locally and within the wider geopark networks.

Laura – She has a degree in politics and has worked with national and regional authorities in both jurisdictions in Ireland. She has worked on numerous EU funded programmes particularly relating to the peace process and economic regeneration. Operates at providing a more strategic vision for the geopark. Ensures there are functioning roles for the geological surveys in the activities of the individual geoparks as well as projecting advice for future or aspiring geopark projects.

Michael – He has a PhD in geology and worked in academia first, before moving to the public sector. In his late fifties he has worked in different capacities both from inside the geopark consortium and in other agencies that provide more specialist support, which is not directly available to that core partnership. Has delivered both practical and more strategic backing for the geopark. He has been a member of the advisory council of EGN in the past.

Brendan – He grew up in the area before going to university in Belfast to study geography and environmental science. A keen speleologist, he spent several summers as a guide at the caves. He has also worked in his family's local business. Initially involved in helping to coordinate some of the voluntary and seasonal activities in the geopark. Is progressing to understand and function in the overarching governance of the geopark.

Shaun – He also grew up in the region as his family run a farm nearby. He has had experience in the forestry agency and also as a local tour guide. His mother is a local teacher and he is in the process of retraining as a school assistant. At the geopark he is involved in the delivery of project activities and educational outreach.

Brigitte – She has lived in the region all her life as her family owned a business in the local market town. Initially worked in the main tourist information office, she has been a long-standing tourism business owner in the region. Familiar with the wider private sector interest and concerns in the region and a member of the regional tourism promotion agency.

Claire – She moved to Ireland twenty years ago and is now in her mid fifties. Is married to a local but they have lived in several other localities in Ireland where the tourism industry is more prominent. A local business owner, who has come to the tourism industry after working in a number of other sectors. Has been involved in some training through the geopark and keen to see a greater involvement for the private sector.

GGN

Anna – She is in her early sixties with a PhD in geology and has worked in and around geology all her career, mostly in the public sector. Lived in a number of different countries through work, she is fluent in several European languages and sensitive to a variety of cultural settings. She played an active role in helping

develop one of the early group of founding geoparks. Is widely familiar with both all geopark locations and active in bringing support to expand the concept into new territories.

4.5 - Multiple and messy forms of fieldwork

The introductory chapters to this thesis have mapped how the geoparks concept and policy has emerged out of a loose federation of individual geoparks that have formally organised continuing exchanges and support into regional and then an overarching global network. Subsequently from September 2014 onwards the Global Geoparks Network (GGN) arranged itself to become, 'a non-profit organization subject to French legislation (the 1901 law on associations) and a non-governmental organization' (EGN, 2017b). A review of the ethnographic study of such network and organisational organisations (cf. Hilhorst, 2003; Mosse and Lewis, 2006; Yarrow, 2008) shows up the need to recognise the complex, hybrid and messy assemblages and roles of actors, and the non-linearity between policy and practice (Law, 2006a).

Consequently when considering which methods may be most sensitive to a multi-sited and multi-situated 'community', the first obvious conclusion is that the objects of my ethnographic study are not bounded by a single locality and thus a more 'traditional' approach to 'fieldwork' that 'involves travel away, preferably to a distant locale where the ethnographer will immerse him/herself in personal face-to-face relationships with a variety of natives over an extended period of time' (Amit, 2000). Instead, as the geoparks model is in large part a concern about

informing and popularising earth science to a broader public, and this research's focus is around the processes used to transfer or transform that policy into practice on the ground, I have been most drawn to the forms of method that Science, Technology and Society (STS) applies through the conceptual framing tools of Actor Network Theory (Law and Singleton, 2014) in an ever widening spread of settings (Latour, 1987; Latour, 2005; Law, 2004; Mol, 2002; Singleton, 2010).

Two repeated instructions from those diverse applications, held sway in my mind as I first viewed the dizzying array of environmental, geological and political circumstances where the concept of geoparks was practiced. First of all as STS looks at matters of practice, it primarily works through case studies (Law, 2004; Law, 2016). Especially as I was interested in the different expressions in which the geopark model was practiced, and already had established a number of contacts, I adopted the case study method as a central component to my research. The three geopark sites I chose, were selected for a number of reasons that are contextualised in their chapter descriptions, but importantly they all build upon the factor that I have already made contact with core personnel and visited all of the sites. Furthermore, each site is distinct and not duplicating or overlapping, and provides a gateway to observe differing aspects of the geopark philosophy and policy interpretation.

The choice of geopark cases also reflects an opportunity to conduct detailed research at sites that reflect different levels of financial and political support. For instance, English Riviera Geopark represents a location that has attached to the

geopark model, mainly through the local unitary council, to revitalise and add additional layers to an existing tourism landscape. The Marble Arch Caves Geopark is an adaptation to include management across international political borders, as well as being a destination in social-economic-political transition and benefiting from a 'peace dividend' (Byrne et al., 2009; Bush and Houston, 2011,; Karari et al., 2013; Colgan, 2015) process. Whilst the Katla Geopark in a highly active volcanic environment informs us how the geoparks policy is being interpreted around geohazards and the challenges of development in remote rural settings.

Within the case study sites I built up a sequence of targeted interviews of semi-structured questions including the trusted type of 'informants' that are described in the previous section on 'geoparkians'. It is worth noting at this point that the approach to interviewing taken by the ethnographer when considering issues of policy, is not the same as for instance how a political scientist would engage with the task. Rather, 'the anthropologist is looking at the interview as a register of multiple orders of information, not just the 'facts' contained within' (Schwegler, 2008). As outlined in earlier chapters, the key staff responsibilities in each of the geoparks are, coordination, geological expert, educational outreach, tourism development along with guiding and interpretation. I conducted interviews in each geopark with each of these key individuals, and compiled field notes, journals and digital photographs. With respect to central geoparks organisation, I also conducted interviews across a number of venues and situations, including at UNESCO headquarters in Paris as well as at meetings called by the geoparks network and other meetings that I have directly arranged with the UNESCO staff. The rationale for such a combination of sites and staff, stems initially from the

factor that in all these places there is no need for negotiation, as I already had established an introduction and access with the individual people. Furthermore the combination of sites provided an opportunity to follow the geopark agents and agency across a wide variety of circumstances and to be able to view different perspectives over the federation, including the central administration point at UNESCO. Those sources were complemented with research around additional public documentation (including media reporting), as well as communications with EGN and other global geoparks and project collaborators.

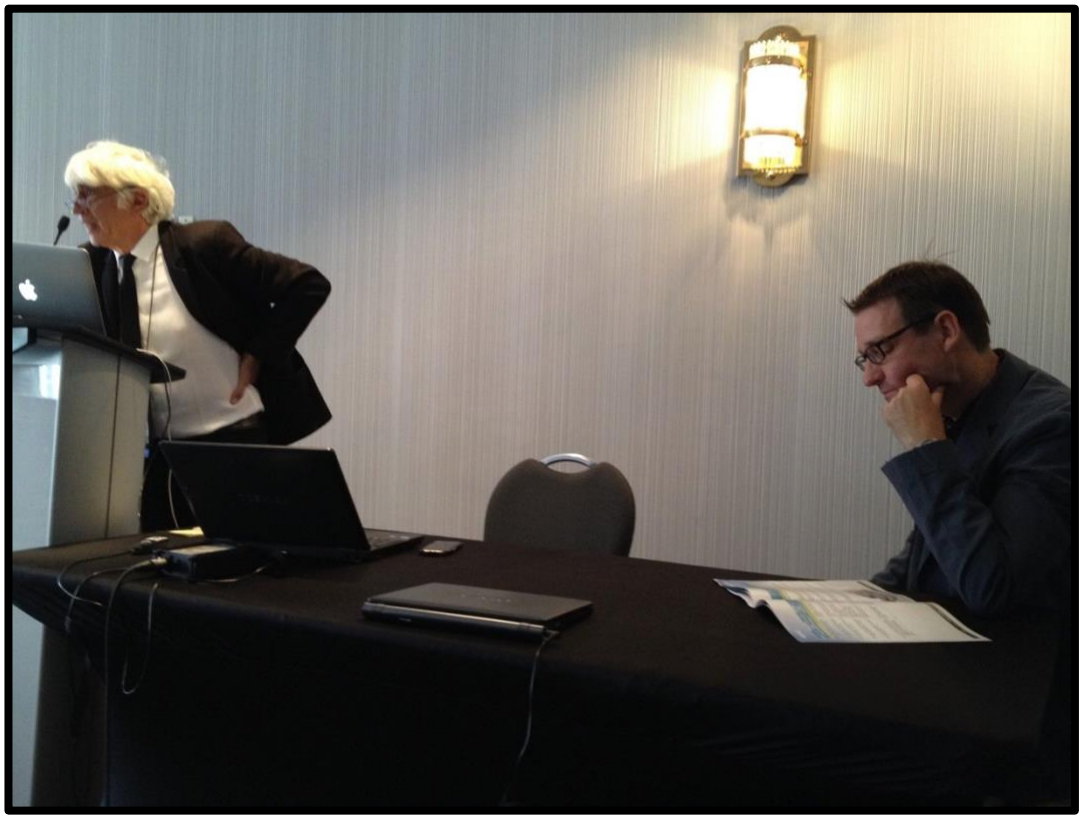

Figure 8 - Co-chairing geopark conference session, an example of getting involved during participant observation (Margaret Hart, September 2014)

In addition, a fundamental aspect of my ethnography involved, participant observation including subsequent analysis to identify significant trends, issues, connections (Hammersley and Atkinson, 2007). It is important to stress that the manner in which the participant observation is conducted, 'rather than observing

from a distance with a clipboard, anthropologists get involved: they help look after children, serve drinks, sell in a mobile phone shop and make genuine friendships' (Miller et al., 2016). In my case this was conducted for example through the delivery of joint presentations at conferences, assisting in the creation of collaborative project bids, or as was the case with Katla Geopark, introducing the geopark coordination team to a study being conducted on the intangible cultural heritage of Iceland.

However, as my research involved the 'studying up' (Nader, 1972) of policy, the opportunities to conduct interviews or access meetings, was often restricted. For instance the EGN coordination committee meetings are open only to the two designated staff from each geopark, along with the figures of the advisory committee. This made it important to utilise further methods and multiple sources of information to corroborate core themes and areas of questioning (Wedel et al., 2005). This is where the second recurrent aspect of STS returned into my thinking. When moving to chart the processes, flow of agency and materials assembled around the geopark model, the guidance is to 'follow the agents' (Latour, 1987). I have to disclose at this point, and admit to begin with I struggled to conceive what that actually meant in practice. To work through this potential obstacle or confusion, I moved to ensure that as far as possible I didn't allow preconceptions limit or close off where I came to observe geoparkians. In so doing my aim was to keep the research open ended, as 'the anthropologist, and most so when in fieldwork dialogue, is open to others and their interpretations and descriptions' (Strathern, 2000: 296).

Besides travelling out to the geopark case study areas, to see the situation 'on the ground' in their territories, I followed the geopark actors out from the quotidian setting into a range of formal geopark network conferences and events. The conferences, which have been described in more detail during chapter 3, are generally conducted over a period of 3-4 days and always involve a day of field excursions to allow the delegates to view at first hand the geosites, landscapes and project activities of the hosting geopark location. In order to have a more participatory role and to generate the opportunity to prompt exchanges with other informants, where it was possible and fitted the conference session themes, I delivered a presentation. The field trip occasions were also another useful opportunity to meet and exchange impressions with different geoparkians. Usually at least 2-3 trip options were provided and each delegate had to select their choice in advance whilst booking to attend the conference. This meant that the person I found myself sitting next to, or walking to a geosite with, was randomly selected. Sometimes I could be sharing the trip with a familiar face, and at other times not. These exchanges were often in spectacular locations, as the hosting geopark sought to impress the delegates with their most striking landscapes. Also compared to the daily tasks in their home geopark, the delegates found the fieldtrips an opportunity to be in a more relaxed environment and to be amongst colleagues and friends they usually met only on the occasion of the twice-yearly network meetings. The shared conversations conducted during those trips were a valuable further source of information and observation. I found too that the trust and friendship built up through such trips, resonated with the comment by Amit (2000: 2), that the 'onus towards comradeship, however incompletely and

sporadically achieved, provides a vantage point imbued at once with significant analytical advantages'.

One further gateway which facilitated the opportunity to gather additional data and corroborate existing information, has come in the form of online platforms and technologies. Over the duration of my research I have found how communications, exchanges of information and observation online, have allowed me to fill in some of the interstices between the other intermittently used methods. In the following section I shall contextualise how the use of online resources has moved rapidly into the frame to be accepted by the mainstream of social science as a sanctioned method.

4.6 - Digital and computer mediated ethnography

My introduction to the possibilities of utilising a component of digital anthropology (Horst and Miller, 2012), arose as one more serendipitous consequence of the extended stay at the 4th GGN conference in Langkawi through the eruption of Eyjafjallajökull, as those delegates, including myself, that had been grounded in Malaysia created an informal internet café every morning in the reception area of the Conference Hotel. To begin we were simply keeping up to date on the news of when the ash cloud might move and when flights home would resume. First of all that news came via websites, but as this was a group of colleagues with a lot of earth science connections, additional news and even first-hand images of the eruption came by email and Facebook entries particularly from Nordic geoscientists in Iceland and other parts of Scandinavia.

In turn this led to the informal group exchanging their Facebook addresses and sharing news and images. However, when we eventually did get back to our respective homes in Europe, we continued to expand those Facebook links to include other delegates we had met at the conference but who hadn't been stranded by the cancelling of flights – this allowed access for instance to additional 'geoparkians' from Asia, Australia and North America. After those initial exchanges, a large resource of information continued to emerge from these Facebook entries. In addition to individual personal pages where a lot of the postings are in relation to geoparks, I found that I could be linked into professional pages for specific geoparks, plus group pages for national and regional geoparks networks.

The idea of actively using such forms of data, and coming to understand the contexts in which it has been produced, has not been straightforward. Questions of validity and how 'robust' online information can be (Horst and Miller, 2013) have been raised particularly during the first emergence of the Internet. However, 'Following an initial early phase of scepticism about the social potential that computer-mediated communication offered, it subsequently became widely apparent that online interactions were of sufficient intensity and significance for their participants that social scientists could study them and in fact needed to take them seriously' (Snee et al., 2016). Although an appreciation of the types of application that web-based methods could be used to support, had been growing for some time (cf. Hine, 2000; Hakken, 1999; Kozinets, 2002), the most significant turn occurred with the transition from Web 1.0 to Web 2.0 – that is the move from an externally input and read-only form of internet, to the essentially social and

partaking Web that involves interwoven system of software and platforms to generate and share content online (Roberts et al., 2013).

The dramatic growth of social media like Facebook and its integration into many facets of daily life, has meant that the different platforms and types of audience that use them, have become an area of increasing scholarly study (cf. Boyd, 2007; Miller, 2011; Miller et al., 2016). The examination of Web 2.0 identities and the trusting that online data was authentic and more than comments or a trivial email message (Hine, 2008), has encouraged me to incorporate the information I was sourcing through these channels. I identified too that being open to this location for my research 'field' accorded with the perspective expressed by Amit (2000: 17) that, 'To overdetermine fieldwork practices is therefore to undermine the very strength of ethnography, the way in which it deliberately leaves openings for unanticipated discoveries and directions'.

As already presented, the initial pathway came through 'friending' on Facebook and the far-reaching geopark presence in both personal and professional expressions. This platform in particular has aided my participation and observation with my informants and the geopark community. With my physical presence on the ground inside geopark locations limited, I found the visibility and continuity of engagement allowed through Facebook most useful. Furthermore the postings and communications allow for both observation, and direct interaction or involvement in conversations. However, my research online was not restricted just to the platform of Facebook. More direct one-to-one or small group communications were also conducted through the use of Facebook messenger or

sometimes What'sApp. As well as text, those applications also allowed for images and files to be shared and exchanged. On occasion I could also host or be a part of online real time discussion or even video conferencing by means of Skype or Facetime. Through the utilisation of this variety of methods and applications, I found myself in agreement with the view expressed by Roberts et al. (2013: 7), that digital methods are adaptable and 'make it easier to conduct longitudinal research'.

As the occasions for contact with my geoparkians proved to be mobile, scattered and episodic, the allowance through engagements online to form a type of glue for the fragmented face-to-face opportunities, ensured that I fulfilled the core temporal aspect of ethnography which is 'to be present in the field site for an extended period' (Miller et al., 2016). In following the agency of geoparks into different corners of my research 'field' including online, I found that it allowed me to adapt to the messy circumstances of mobility, convergence, divergence and creation of different assemblages of consortia, but also those in the ANT sense involving non-human as well as human actors. The repeatability and substance of near daily contacts online, allowed me to confirm or corroborate with the perspectives I was getting during periods in the 'field on the ground' in the case study areas and the formal geopark network events and conferences. The congruence found in the engagements online and offline between myself and my informants, has in turn helped to establish a form of triangulation of complementary information (Hammersley, 2008), that 'mutually enriches' each of the individual methods (Brumann, 2012).

Geoparks as a study of policy and agency are a moving target. I established this further with phases of computer mediated or cyber-ethnography utilising connections through Facebook, Twitter and other online communications. Such methods are acknowledging the new and multi-faceted forms in which people are exchanging information, communicating and interacting, and combine to shape the ethnographic 'field' as a more mobile 'flow' (Skinner, 2005). Therefore in being flexible with the techniques I have utilised, my aim is to work towards ensuring that these methods are made sensitive and appropriate to my specific subject matter (Boellstorff et al., 2012).

Chapter 5 - Case study of the English Riviera Geopark, UNITED KINGDOM

Basking sharks, cliffs and low-rise lighthouses

August 2011

Although he's introduced this corner of the bay on so many occasions to so many visitors, there is still a lively, enthusiastic and proud feel to the way Peter narrates the route through the winding streets up from the harbour at Brixham and out onto the solid limestone arm that is Berry Head. The car park at the entry for this gateway site to the English Riviera geopark, is only a matter of minutes from the bustling activity of Brixham harbour. But it already has the feel of a rich open relaxed and valued stretch of countryside. We are barely out of the car and Peter is already acknowledging familiar faces. Two jolly 'hello there's', and a brief exchange. "What have you seen this morning?" - "Oh we've just been checking up on the quarry and our resident bats there". Once the exchange is over, Peter mentions "you never see him without a pair of binoculars around his neck! He spots everything here. There's not a bird, plant, beastie or creepy crawly he can't recognise. Last month there was a basking shark cruising up and down right inshore there. Huge it was, you could spot it right up on the cliffs here".

Peter points out the small grey set of buildings at the edge of the gravelled area. That's where the former visitor information area was. It's a toilet block now. "It was a bit bleak and cold, we don't miss it. But now we've got a fancy new renovated centre. Heritage lottery money, nice cafe too, you might get to try a scone if you're lucky". Walking on a soft cushion of grassy path we pass a few hundred metres out to the headland proper. There is a busy mixture of dog walkers, some bird spotters

heading over to the hides just beyond the visitor centre, and holiday makers taking advantage of the bright August day. Like us they are here to look out all the way across the great sweep of the bay and with a bit of luck maybe catch sight of a dolphin or whale passing along the Channel. But before that we step inside and take in the exhibition panels and a short introductory film that explains and contetualises the geopark. A few other visitors sit down and hear about the layers of history, people, the wildlife and underlying it all the geology of a bay that started off south of the equator as warm tropical seas where the Devonian limestone we are now sitting on, was first deposited.

It's a light touch, and not too many technical, scientific terms. The centre is something Peter is really proud of. He explains to me that it brings things together. It's a meeting point. There are all sorts of reasons people come up here and a lot of strata to share in the series of stories the geopark team get to present. His pride is in being a part of making things happen and pooling resources and reasons to be interested in the bay and out and about in this very accessible geopark. We walk all the way to the end of the headland and eventually to the most low-rise lighthouse I've ever seen. With a bit of a laugh, Peter explains, "well its high enough already at the top of the cliff here! You can see the light for miles". This is a place to gain a wide perspective. Looking all the way round beyond the red sandstone at Paignton and across to Torquay with the opposite headland arm of Hope's Nose. "There is always something going on out on the sea as well. And it's a great place to sky watch, fluffy clouds and birds, or watch for the weather coming in!". On the way back to the vehicle we pass another geopark sign explaining about the Napoleonic fort and the limestone quarry that cuts all the way from the top almost down to the sea. I notice

people casually glancing at the sign. One or two read closer, but the emphasis is on leisure and enjoying the outdoors, and today the sunshine.

5.1 - Introduction

This chapter is one of three European cases where I examine in greater detail how and why specific territories present their vision and adaptation of the geopark model, which is formally introduced by the geopark network committees and UNESCO earth sciences department. In each case I look at the consortia of partnering organisations and individuals, and the rationale given for the selection of that partnership, along with the defining boundaries of the geopark, both in physical and political terms.

In particular I use the case studies to consider which policy frameworks are of significance in the development of the specific geoparks, and how those policy influences come into contact with the geopark structures and stakeholders. I also assess how the individual geoparks relate to and utilise the wider geopark network. Through viewing how those geoparks present themselves outside of their territory, on the national and international stage by means including conference presentations, panel debates, promotional materials, it is also possible to compare with what is said and viewed when visiting the geopark in situ.

The information built up around all three case study chapters is derived principally through interactions with the staff that represent the geopark at the

EGN coordination committee level. The data having been collected by means of interviews with the geopark staff in a variety of settings both inside the geopark territory itself and outside at geopark network meetings, events and conferences. This is supported by further participant observation at the respective geoparks and gathering of printed and electronic materials. As explained more extensively in the methodology chapter, this data gathering has taken place over the period between 2009 and 2016.

By Spring 2016, 120 UNESCO global geoparks in 33 different countries had emerged and been formally designated by the network (UNESCO, 2016), as well as a number of localities that had dropped out of the network or been shown the red card during the revalidation process. The extent of the network therefore provides a wide range of opportunities when considering the choice of individual geopark locations through which to address the thesis research questions. As initially presented in the methodology chapter, the rationale behind those choices was multi layered. Language, geographical proximity and ease of access certainly played a role. Eventually three geopark sites were chosen where I had already made an initial contact with core personnel and visited the localities on the ground. Each one is distinct and provides a differing set of features through which to investigate alternative interpretations of the geopark philosophy and associated policy directions. The choice of geoparks also reflects an opportunity to conduct detailed research at sites that reflect different levels and channels of financial and political support.

5.2 – Why English Riviera Geopark as a case study?

With the selection of the English Riviera Geopark in addition to the rationale indicated above, the location of Torbay is the closest to geopark to where I live and so the most convenient to access. Furthermore the serendipity of my extended stay at the GGN2010 in Langkawi, Malaysia (further explained in chapter 4), also had a hand. During that unscheduled stopover of ten further days I had the opportunity to broach more detailed and significant questions to geopark delegates for the first time. One of the outcomes of this was that I was greatly encouraged and invited to visit the English Riviera Geopark at my earliest opportunity. Following up that invitation in the summer of 2010, I took the three and a half hour train journey from London to Torquay, the political hub of Torbay in South Devon.

The Bay as it is referred to locally, is a sweeping C shaped area of coastline that has an advantageous East facing perspective, away from the prevailing South Westerly winds and further protected by the prominent limestone headlands of Nope's Nose in the North and Berry Head in the Southern side of the bay. Torbay Council Unitary Authority (hereafter termed, Torbay council) is the single local governmental authority for the area, bringing together the three towns of Torquay, Paignton and Brixham. Fundamentally to maintain the simplest consortium structure, the English Riviera Geopark shares the Torbay council boundaries in their entirety, which has led to it being described as the first urban geopark in the world (English Riviera Geopark, 2016). The council and consequently the geopark, is comprised of an area of 64km^2 land in addition to 42km^2 of marine territory (English Riviera Geopark, 2016). That first visit was taken to generate an understand as to what the English Riviera Geopark looked like on the ground, and

how its organisation and management was explained by coordinating staff and representatives.

The remainder of this chapter presents the findings from extended research conducted periodically between 2010 and 2016. This was carried out either in person at the English Riviera, or mediated through staff from the English Riviera Geopark, at other geoparks events or through online methods.

5.3 – Aims of this chapter

The aims of the chapter are twofold. First I show how the geopark consortium managed through a newly created English Rivera Geopark Organisation (ERGO), generates and presents its local partnership. This is based upon a combination of demands and obligations that are dictated by the principles, guidelines and written articles of the geopark model as formulated and periodically updated by the European Geoparks Network coordinating committee. Plus the motivations and stimuli of local and national policy directives, which in the case of the Torbay unitary council was related to concerns of regeneration built around a framework of heritage management and conservation that is consciously connected to the region's economic mainstay, of tourism.

The second aim of the chapter is to illustrate how and why the geopark management organisation connects with partners and networks from outside of the local Torbay context. These include the relationships with existing agencies that have a direct interest in the functions and development of the geopark model

in the United Kingdom – significantly this includes connections with the United Kingdom National Commission for UNESCO, Nature England (the governmental advisory body on the natural environment in England), the British Geological Society and the Geology Society. Plus I look at how the English Riviera Geopark connects with other geopark agents. Either as bilateral affiliations, as clusters of geoparks coming together for collaborative projects and work, or through the channel of the European and Global Geoparks Networks at meetings, events and conferences. The essence of this engagement being to consider how the English Riviera is adhering to the central image of the model, or influencing the direction taken within the geopark committees and structures. In other words, is the geopark solely shaped by the geoparks charter or is it shaping the network and the model?

5.4 – Backdrop to the geopark territory

'The reason Torbay is a Geopark is because we have an unusual combination of a superb natural setting, rich cultural heritage, a very significant tourism industry and a pressing need to regenerate. The Geopark is based upon and flows from the natural world but it embraces culture, built heritage and economic development where these relate to the natural world. An over-riding principle is that we achieve regeneration in a sustainable way.' (Torbay Coast and Countryside Trust, 2008). The quote above summarises how English Riviera Geopark seeks to be contextualised as outlined by its management organisation. But how is this transformed and presented on the ground?

For such a compact geopark in terms of size, the English Riviera Geopark is comprised of a diverse range of coastal elements. Although it is described as being the first urban geopark (Application form, 2007), it is far from being a single continuous built up conurbation. The area governed by Torbay council for instance indicates that about 45% of its land territory is green space made up of farmland, woodland or other open space (Application form, 2007). Add to that the 42km^2 of sea in the bay and adjoining coastal area, and it is apparent that the geopark operates around a combination of urban and rural, land and sea spaces. This arrangement allows for a number of ways in which terrestrial and marine forms of tourism can be presented and developed in the region. Added to this the complexity of heritage components situated around the Bay, and it is apparent that the council has a challenging task when aiming to sustainably manage all these resources.

Figure 9 – Location and features of English Riviera Geopark (ERTC, 2016)

In terms of population centres, the three towns of Torquay at the northern end of the bay, Paignton in the centre and Brixham in the south, make up the great majority of the resident population of 133,375 people (Torbay Council, 2016b). All

three have a long history of settlement, initially based around fishing and agriculture. But since the 19th Century, seaside resort tourism has played an increasingly influential role in their development. The safe sheltering provided in Torbay meant that tourism was initially boosted by the presence during the Napoleonic wars of crew, extended families and friends from the Royal Navy (Bryon, 2013). Torquay in particular reached a fashionable status by the Victorian era, with its perceived healthy climate and appealing setting attracted a fairly wealthy clientele.

Paignton in turn positioned itself as a centre for traditional family seaside holidays, with its sandy beach, harbour and pier being the focal points for visitation (English Riviera interview, 2011b). Whilst Brixham, maintained a strong connection to the fishing industry that although fluctuating in its fortunes, still ensures that in terms of value of fish lands, it figures as the largest fishing port in the UK outside of Scotland (Morgan, 2013).

These differences in developmental direction, aligned with their physical settings at differing strategic points around Torbay, meant that each town was acutely aware of the others and brought about considerable local rivalry around the bay (English Riviera interview, 2011b). Nonetheless it is argued that the council goes out of its way to be very evenhanded and inclusive across its constituency (English Riviera interview, 2011a). This summation is backed up by the balance of tasks and activities generated and delivered across the geopark by both geopark staff directly and through other council departments that the geopark has everyday

interactions with – these include cultural services, museums partnership, children's service and transport services (ERGO website, 2016).

In governance terms, the three towns were formally brought closer together in 1968 when Torbay County Borough was created. However, the most significant step took place in 1998 when Torbay Unitary Council came into being and amalgamated together all of the local services provided by government, under a single authority (Torbay Council, 2016a). The significance of this authority will become more apparent when the organisation and management of the geopark is described.

5.4.1 - How the English Riviera Geopark presents its structure and management

As has been outlined in the chapter introducing the geoparks approach, their definition has gradually been developed and clarified over the past decade and is now presented as being

'single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development'. (UNESCO, 2016c)

The local response in the English Riviera of South Devon in England was first shaped around 2004 by the Torbay Heritage Forum – a grouping of stakeholders and interest groups with an interest in various aspects of heritage across the Torbay area. Following feedback on an initial application to join the European

Geoparks Network (EGN), the decision was made to create a not for profit company limited by guarantee. That company, the English Riviera Geopark Organisation (ERGO), was devised in order to coordinate and direct the geopark and subsequently took the lead from its predecessor, Torbay Heritage Forum, in evolving the application to become a member of the EGN. Led and submitted by Torbay Council, the bid in 2007 was finally successful (English Riviera Geopark, 2016).

Before progressing to consider how the English Riviera Geopark appears both physically on the ground, and in policy terms of how it is presented through ERGO, and interacts with other organisations and groups in the geoparks arena, it is worthwhile to first consider its management structure. This is in order to view which stakeholder groups are direct members of ERGO; establish which are influential on a day-to-day basis; and to assist in identifying where local and national policy interests may come into play with the organisation and development of the geopark.

Formally, the structure is diagrammatically laid out and presented in a key document – The English Riviera Geopark management plan of 2007. That diagram can be seen below:

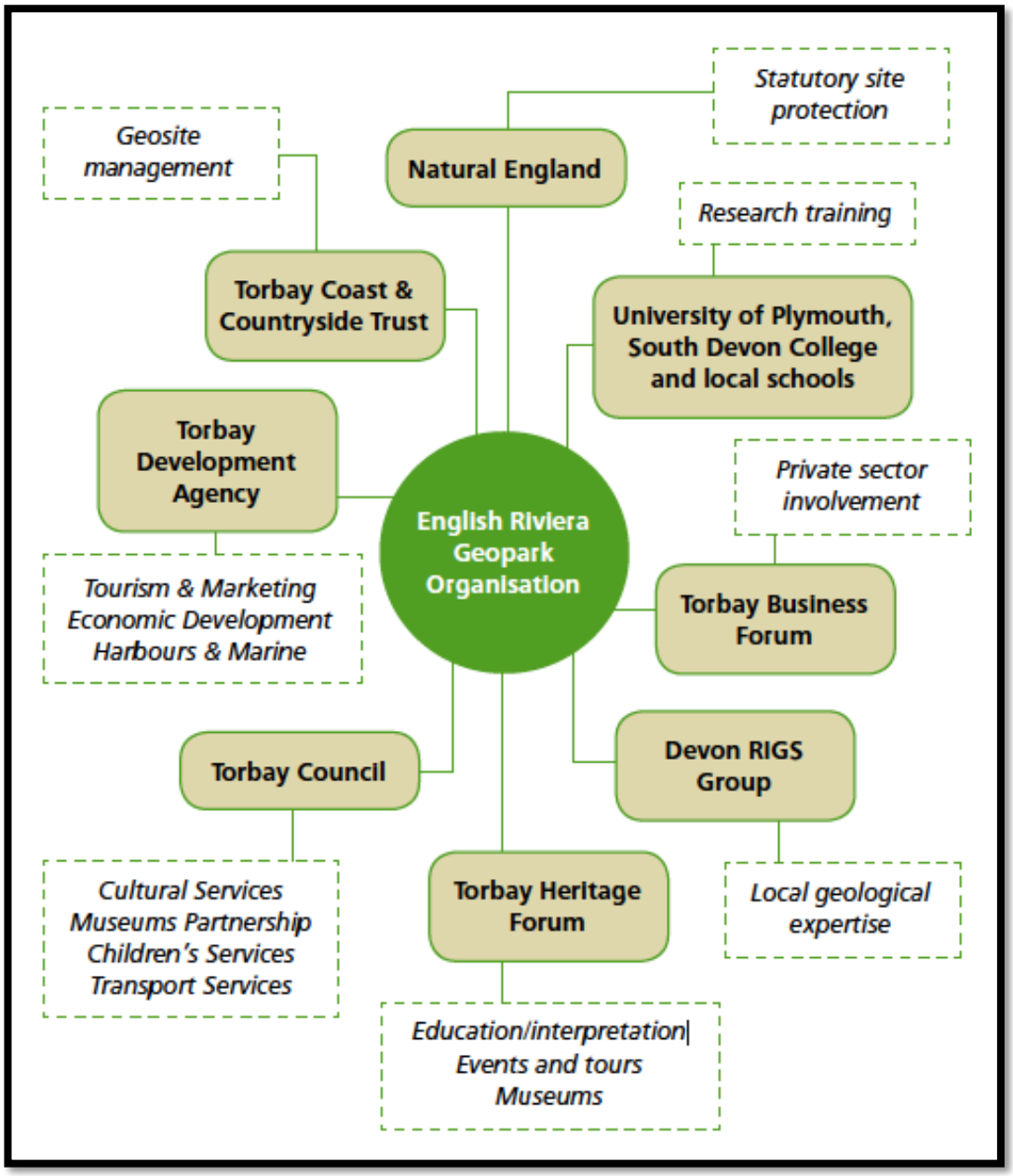

Figure 10 - Membership of English Riviera Geopark Organisation (ERGO, 2007)

The company has four principal roles:

- Site conservation and access
- Education and community participation
- Tourism and marketing
- Coordination of the geopark

When explaining the organisational structure as laid out in the diagram, senior members of ERGO outlined how this was a preliminary form, which had been revised once tested and actually applied through the process of numerous meetings of the grouping and also to reflect the demise of some organisations and the creation of other new ones (English Riviera interview, 2011a). The initial strategy was to draw together in quarterly meetings, representatives from each of the partner members within ERGO. This meant that the following stakeholders sat in those early meetings:

- Elected mayor of Torbay
- Geopark coordinator (Melanie Border)
- Chair of ERGO and owner of Kents Cavern (Nick Powe)
- Torbay Coast and Countryside Trust - CEO
- ERGO Education officer
- Geologist from University of Plymouth
- Representative from the local further education college who works on life long learning
- Natural England – representative from South West region
- Cabinet member of council responsible for cultural heritage
- Cabinet member of council responsible for the natural environment = Dave
- Cabinet member of council responsible for tourism
- Geopark volunteers – John Risdon from Heritage South Devon
- Greenway Ferries
- Local radio station
- Journalist from Torquay Herald Express

- Primary and secondary education - representative from the Local Education Authority
- Torquay museum
- Torre Abbey

Unsurprisingly this large and diverse forum did not function as a strategic decision making body. Consequently, a considerably smaller group called the Geopark Management Group (GMG) was established. At its start in 2009, this consisted of seven people,

- Cabinet member of council responsible for the natural environment – Chair
- Torbay Coast and Countryside Trust – CEO
- Torbay Coast and Countryside Trust – line manager of Geopark coordinator
- Geopark coordinator
- Chair of ERGO
- English Riviera Tourism Company - CEO
- Council officer for tourism, resident and visitor services

This grouping was chosen with its chair being the council member for natural environment and other key stakeholder staff, as they were individuals who 'can make decisions, especially financial ones' (English Riviera interview, 2011a). They were to meet much more often, ideally every two weeks, and in the interim maintained close communications through email. The net effect of this change was that the English Riviera Geopark was strategically controlled by relatively small

cluster within Torbay Council, Torbay Coast and Countryside Trust, and Kents Cavern.

That is how the geopark management is mapped out in documentation, but how is this manifested on the ground? In what ways do the organisations present their vision of the geopark, and is the geopark seen and understood in a similar way by residents and visitors?

To form a perspective on those questions and derive my own impressions, I made seven visits to Torbay lasting from between two and seven days. These were taken in order to conduct participant observation, and interview a number of key informants who had senior positions within ERGO. The first of those visits took place in July 2010. It served to set the scene in terms of how the geopark was laid out with regards to the features prioritised by its management organisation (ERGO). As I wished to get a rapid overview of the geopark, and also to build up the relationship with key informants whom I'd met at the Global Geoparks Conference in Malaysia earlier that year, I decided to be guided by them and allow them to show me their geopark. This next section offers a brief presentation of the features I was shown around, and is then followed by an introduction as to how the vision of the English Riviera Geopark is projected in terms of how the organisations, sites, events and activities are explained by the same staff members.

5.4.2 - Access points and gateway sites

The following section is based upon an amalgamation of data gathered during the seven on site visits, combined with conversations with geopark staff during

geopark conferences, as well as communications through email and social media over a period of eight years. For the majority of field visits I arrived by train, as it remains the quickest and easiest route between my home in London and South Devon. Services to Torbay have a long history that has been influential in terms of overall economic developmental and in the progress of tourism in particular. The first direct boost came through the construction of Torre railway station in 1848. This was followed in 1859, with the building of a branch line between Kingswear (across the River Dart from Dartmouth) and Torquay that along with intermediary stations served the whole bay area (Maggs, 2013). The full branch line operated until 1972, when the section between Paignton and Kingswear was sold and became a heritage railway know as the Dartmouth Steam Railway (Maggs, 2013). That line continues to this day and connects a number of significant leisure and heritage destinations, including a designated stop named Greenway Halt, which serves as the drop off point for the National Trust owned property of Greenway House and Gardens, the former home of Torquay born crime writer Agatha Christie. National rail services now terminate at Paignton station.

Considering Torquay station is one of the principal access points for non-residents into the geopark, it was quite noticeable that amongst the considerable array of tourism information and signage, there is currently no welcome sign. This is due to land ownership issues, with the railway station itself owned by Network Rail but managed by Great Western Railways. Neither of those businesses are stakeholders in the English Riviera Geopark Organisation (ERGO), and the geopark does not therefore have a straightforward or cheap solution to erecting signage or information panels at that site or the other local railway stations (English Riviera

interview, 2011b). In contrast the main road access points, particularly the main A380 road, have prominent brown heritage signs and additional lit panel promotional signs introducing and welcoming the visitor to the geopark. This is because these localities are managed by the local council authority, which is the principal stakeholder in the management of the geopark.

On the first visit, in order to gain another perspective of the area, I also took along a bicycle, although the eagerness of my hosts from ERGO to show me around the gateway sites meant that I eventually only used it to move between the bed and bed breakfast accommodation and the railway station. The accommodation, Cranmere Court in Wellswood, was chosen as it was located within two minutes walk of Kents Cavern, one of the most significant sites in the geopark. The cycle there also took me past Torquay Museum, another of the original partners in ERGO and initially one of the gateway sites. However, I was soon to learn that the lack of understanding and interest in the geopark project meant that little tangible evidence of the geological heritage was presented. Equally on visiting the museum more extensively in 2012, there were few signs regarding the geopark directly.

As the geopark status is not a further designation or protected area such as a national park or Area of Outstanding Natural Beauty (AONB), the key points where the concept is manifested and visible are firstly at what the geoparks network terms 'gateway sites'. In many geoparks the gateway locations include a dedicated visitor centre to introduce the geopark concept and the features of the individual geopark. But as of 2016, the English Riviera Geopark didn't have such a site although its aspiration for one was mentioned as early as in 2007 within its

application form to join the European Geoparks Network (Torbay Council, 2007). Instead the initial starting points for information, trails, guided events and other activities generated by the geopark, are organised around three existing sites which are owned and managed by different stakeholder groups that are part of ERGO. Reflecting the overall council strategy to encourage balanced development around Torbay, the geopark mirrors this by having one centre in Brixham (Berry Head national Nature Reserve), one in Paignton (The Seashore Centre) and one in Torquay (Kents Cavern). The first two are managed by Torbay Coast and Countryside Trust, a local charitable organisation that was created to manage the main publically owned green spaces across Torbay. Whilst Kents Cavern is a privately owned show cave and attraction that has been run by the Powe family for five generations (English Riviera interview, 2011a).

Beyond the three gateway centres, the geopark management through its website, leaflets and other promotional materials, directs the visitor to explore the area alternatively via any one of a further eight sites which relate to the local natural and cultural heritage that also introduce or connect with the geopark. They range from museums, to heritage buildings such as Torre Abbey, country parks and leisure activities such as boat cruises around the coastline or taking the children to a geologically themed play area. It was therefore no coincidence that my guides/informants approach to giving me a sense of what the geopark incorporated, was conducted through moving between and stopping at a number of these gateway and 'other key sites of interest' (as they are described in the promotional literature).

Occombe Farm

Because of the time of day, the first site I was shown was Occombe Farm where we would take in lunch. The short drive of just 15 minutes from near Kents Cavern to the farm, passed through the coastal side of Torquay and then inland for a few kilometres. That brief journey demonstrated the rapid transition between urban centre, coastal strip and within a short distance into green farmland. The immediacy and quick change of land use around the bay is one facet that is continuously emphasised by the geopark. When the geology of the area is also incorporated and explained, that transition provides a useful platform from which to present the narrative of the connectivity between landscapes and human settlement.

Occombe Farm itself is now owned and run by the Torbay Coast and Countryside Trust (TCCT) and is described as being:

"A demonstration organic farm re-connecting people with food, farming and the countryside. 2km easy-access nature trail, education centre, award-winning farm shop and cafe featuring the best of local food, together with an in-house organic butchery and organic artisan bakery". (English Riviera Geopark, 2016)

It is open all year round to the public, and entry is free. The farm site is a heritage reminder of the agricultural roots particularly of Torquay and Paignton, but also serves to incorporate messages regarding well-being and healthy living (Torbay Council, 2012). The land is managed to soil association standards, and the linkage between food, farming and the natural environment, is drawn together further

through a number of other activities - These include a cookery school and classes for both adults and children; a nature trail around the farms fields, hedges and woodland; as well as access to community and wartime gardens as well as the arable and pastoral farming at the locality. A farm shop is also present to showcase the local produce, some of which comes from Occombe, in addition to other local suppliers.

Coastal sightseeing cruise

On the occasion of my first field visit to the geopark in 2010, I was also guided around the 40% of the geopark that is marine. The perspective from the sea is described as the best way to view, understand and appreciate the geological heritage (English Riviera interview, 2011b). Furthermore, the options to take to the water in the geopark are numerous, with a broad range of small businesses catering for sightseeing, sea fishing, adventure tourism and even provision for the commuter through regular year round services across the bay between Torquay and Brixham. As with the activities conducted on land, there is a seasonal emphasis whereby most services run between April and October. Outside of that period, things are scaled down for the low season. But as highlighted by the commuter ferries, everything does not halt completely.

Reflecting the focus of the land based sites and services, the promotion of the geopark aims to connect with maritime activities through stressing the linkage between people and the easily accessible natural environment. Also there is a mention and drive once more of healthy and outdoor living. This is encapsulated within a extensive brochure called 'energise: get active in the English Riviera'

(English Riviera Tourism Company, 2016), which acts as a compendium for all of the outdoor, adventure and sporting activities that are catered for in the area, a significant number of which are conducting in or on the water. As well as pointing towards the individual companies where the activities can be booked, two full pages are dedicated to the geopark, thus making the association with healthy outdoor pursuits.

Figure 11 - Clearest perspective of coastal geology at English Riviera geopark viewed during sightseeing cruise (Jonathan Karkut, Sepetember 2016)

Within the bay area there are four boating companies that operate with a specific tourism and hire market in mind. Greenway Ferries, Brixham Express Ltd, Western Lady Ferry services and Paignton Pleasure Cruises all provide options for pleasure cruising or connecting ports around the bay. The geopark has also been marketing a two hour Geopark Sightseeing Cruise and linked up with Paignton Pleasure Cruises. On the occasion of my first visit, my skipper and guide proceeded to take

us on a similar two hour cruise, but in this case we went out of the bay itself, and up the coast to the Northernmost limit of the geopark just beyond Maidencombe in Babbacombe Bay, which as the geopark has a complete overlap is also the end of the area covered by Torbay unitary council.

En route it was possible to see many of the principal coastal features and tourism sites. These include the northern arm of Torbay, Hope's Nose. The peninsula is a Site of Special Scientific Interest (SSSI) that is a conservation status outlining a protected area. In the case of Hope's Nose, it demonstrates some important Devonian strata that are fossiliferous in places, plus a well preserved raised beach that is now 25ft above today's sea level. Also a rare form of gold has been found in the limestone rocks. The presence of gold has attracted illegal mineral prospectors who have damaged the site by using rock saws to hack out lumps of the outcrop which may contain gold. Samples are then sold illegally to private collectors. This situation is of relevance to the conservation measures of the geopark, because within the European Geoparks Network Charter, the sale of fossils and mineral specimens by its partner organisations, is forbidden. Raising awareness of the value and significance of the site through geopark activities, is therefore an important contribution for the future protection of the Hope's Nose site (English Riviera interview, 2011b).

Travelling further along the coast sailing past Anstey's Cove, the final site at this end of the geopark is Oddicombe Beach, which is connected to the town of Babbacombe by a Victorian cliff railway. The location is also an ideal point for the geopark to consider geological hazards, as at the Northern end of the beach there

have been a series of major landslips. Although this section of highly unstable coastline has been cordoned off since 2002, we saw at least one person clambering over the rocks in the area. Each time the iron rich sandstone collapses from the cliffs, a whole section of the sea in the area is turned blood red and remains thus for several days. Although dramatic in this corner of the territory, communication and training regarding geo-hazards is not a significant priority in the English Riviera. Unlike a number of other geoparks, particularly where there is tectonic activity, which tend to play a stronger role in educating and building up knowledge about the nature especially of volcanic and earthquake hazards.

Kents Cavern

From the very beginning of the bid to become a geopark territory, this site and its owner has been integral in building to understand the concept and utilise its potential to assist the growth and future trajectory of the show cave and the stories around it. The Cavern still retains its position as one of the gateway visitor centres for the geopark. As well as the geological processes involved in forming the caves, it is a protected national site due to its position as the most important prehistoric cave dwelling in Britain, with an unparalleled archaeological record of prehistoric human life in ancient Europe.

As the caves were relatively quiet during the afternoon of my visit, the owner took me on a private tour of the site. We walked around the numerous chambers whilst my guide explained the history particularly of the archaeological digs during the mid-19th Century that had exposed their full extent. He also ran through the story of how his great-great grandfather had acquired ownership of the site. Nick Powe

is now the 5th generation in his family to run them as show caves. He came relatively reluctantly into running the family business, as he admitted he was happily placed in a senior accounting job within multinational company in France, when his father passed away. As the oldest sibling and an experienced businessman, ownership travelled into his hands. Whilst Nick's father had been ill for several years before his death, the business had become what he described as 'being a bit stale'. Consequently over the past few years, Nick has had to work hard to bring in new innovations and ways of revitalising the business. These have included an expansion of the eating and retail facilities at the entrance, plus the introduction of a range of ways to use and rent out the space in the caves. These include the running of 'ghost tours', staging of Shakespeare plays, hosting of private functions, parties and wedding groups plus further children's and schools trips.

In addition to this more commercial form of exploitation, Nick has built up contacts with local and national scientific groups interested in conducting further research and exploration into the early human habitation of the British Isles. The membership and role of the caves in the geopark organisation is connected to this part of his strategy that aims at providing a serious scientific backdrop to some of the more leisure based activities. Other connections include ensuring Kents Cavern has a prominent role in the Association of British and Irish Showcaves (ABIS), and draws the benefits of that profession grouping (Association of British and Irish show caves, 2016).

Berry Head National Nature Reserve

Seeking to complete the visit to all the locations that are identified as being key by the ERGO, I continued from the cavern to Berry Head, which is in the neighbourhood of Brixham on the southern tip of the geopark. The twenty minute drive along the coast road allows a good perspective of Torbay and the connectedness of the three towns of Torquay, Paignton and Brixham.

Berry Head is another corner of countryside that is easily accessible to the urban centre of the bay, and a point where the connection between human habitation and the local landscape is emphasised. The site forms the Southern arm or peninsular to the bay and like Hopes Nose is geologically a Devonian limestone. It is a National Nature Reserve and also lies within the South Devon AONB and on the South West Coast Path. As a country park it also represents the principal recreational area for the adjacent town and port of Brixham, and as witnessed on the day of my visit, is a popular site for dog walkers.

The creation of Torbay as an ideal natural sheltered harbour, along with the wide vista available from the 65m high cliff top, has meant that the peninsula and bay has long been held as a major strategic military site. This is reflected by the presence of two well-preserved Napoleonic Forts, a lighthouse and some further WW2 heritage all within a short distance of each other. The peninsula was also quarried extensively for its high quality limestone, whilst the thin limestone soils form a rare habitat for particular flora and fauna suited to those conditions. Looking out to sea, the whole sweep of Torbay is visible and is a favourite spot for sighting marine birds, mammals and fish such as basking sharks (English Riviera interview, 2011b).

The visitor centre recently benefited from a substantial reshaping thanks to Heritage Lottery Funds (HLF) (http://www.berryhead.org.uk). As part of a 3 year programme started in 2009, called 'Berry Head – On the Edge', the centre is now sited in one of the Napoleonic forts and houses a prominent exhibition regarding the geopark as well as a newly expanded cafe and shop. The previous site for the visitor centre was in a smaller and much run down building further inland. That site also benefited from restoration using the HLF money, and is now used as a base to train staff and volunteers associated with Torbay Coast and Countryside Trust (TCCT). Inside the visitor centre in small side room it is possible to watch a looped short film on the English Riviera Geopark.

It is a ten minute drive through the narrow and steep streets of Brixham round to the neighbouring town of Paignton. The third of the gateway sites is located there in what is called the 'Sea Shore Centre'. Located right near the sea front at Paignton, the centre is used to demonstrate the range of marine life that is present across Torbay. There is a link into the geological story of the region, as during the Devonian period when many of the local rock sequences were originally laid down, Torbay was also in a marine environment – although 400 million years ago it was tropical coralline and south of the equator.

The centre has four exhibition rooms, one of which is dedicated to the geopark. Although people do walk into the centre off the street, a significant amount of business is conducted with the local schools that substantially use the resource and facilities. Upstairs from the exhibitions, the first floor hosts the offices for

TCCT staff. By 2016 it is also home to another partner organisation of the geopark called Reach Outdoors. This local business is a focal point for a wide range of outdoor and adventure activities that are particularly tailored for the schools and youth markets.

Figure 12 - One of the 'gateway sites' for English Riviera Geopark, Berry Head Visitor Centre (Jonathan Karkut, August 2011)

Cockington Court and Torre Abbey

The final piece of the 'key sites of interest' jigsaw is completed with a brief introduction to two heritage sites located in the landward facing aspect of Torquay. Cockington, comprised of an historical village, manor house and landscaped country park, is one of the most popular leisure sites close by to the conurbations of Torbay. Local crafts outlets are housed in the hall stables area and on the day visited it was a busy location. There were few direct indicators that this was within a geopark.

From Cockington it is a five minute drive/walk/cycle on to Torre Abbey, another heritage site which is described as the oldest building in Torquay. The Abbey is very close to the centre of Torquay and the coast. It is a significant visitor attraction and links up with the neighbouring 'Spanish Barn' to form an arts and heritage centre. The Abbey and Cockington are amongst a cluster of sites that are highlighted on the English Riviera Geopark website although these places do not have any direct geological interest. They are listed however, because they are seen as important public spaces and managed by organisations that are partners within the Geopark structure. This means that there is the potential for those sites to contribute to the visibility and promotion of the geopark as a whole. Thus far that potential appears to have remained relatively untapped when it comes to introducing and making a wider public aware of the geopark.

When moving around the Torbay area, either on land or at sea, the majority of the specific sites or attractions appears solely as an expression or creation of the geopark. The exceptions being Kents Cavern and the Paignton geoplay park – although these are still not purely sites of geological heritage either. Rather the points of interest are a sequence of existing heritage, leisure and landscape expressions which collectively are drawn together within the boundary of the geopark, and are used to encourage and guide both residents and visitors alike to connect with the landscape and discover aspects across the whole bay area. Alternatively it can be viewed from a different angle, whereby the geopark may be understood as a policy tool to support the management of a disparate and diverse sweep of heritage features that had previously been organised through a range of

public and private funds and management systems but never collectively (Torbay Council, 2007).

5.4.3 - Geosites

Beyond the gateway and key attraction sites however, the geopark does draw attention to certain points where the geology is of 'international value'. This is not surprising, as outlined in the introductory chapter, it is expected that the starting point for every geopark must been the identification and protection of local geological heritage. This is indeed laid out in the first article of the EGN charter:

'A European Geopark must comprise a certain number of geological sites of particular importance in terms of their scientific quality, rarity, aesthetic appeal or educational value. The majority of sites present on the territory of a European Geopark must be part of the geological heritage, but their interest may also be archaeological, ecological, historical or cultural'. (EGN, 2017b)

Those various 'geological sites' as defined in the geoparks charter, are inspired and adapted from the Geosites project. That project is a worldwide effort coordinated by the International Union of Geological Sciences (IUGS) with additional support from UNESCO, to audit and devise a database of significant geological sites and landscapes for the purposes of geo-conservation. In turn as the EGN charter indicates, geoparks have expanded the definition to include further environmental and human aspects that have been influenced by the local geology.

In the case of the English Riviera Geopark a total of 32 individual geosites have been identified and highlighted, initially through the process of the Geological Conservation Review, which was the United Kingdom's major initiative starting in the late 1970s, to conserve earth heritage of national or international significance (Joint Nature Conservation Committee, 2017). The sites listed in the English Riviera are a variety of outcrops, caves, cliffs, mines and quarries, which are representative of the three spread geological periods most visible in Torbay. Those geosites are evenly distributed geographically and set out the purely scientific and geological rationale for the selection of the geopark to be allowed to join into the European and Global networks.

From those 32 geosites some are easily accessible and visible, and have become central aspects or corners of gateway and interest sites, such as Kents Cavern, which as a show cave actively encourages visitation. While other sites are actually restricted to the general public because of conservation measures regarding their scientific significance or simply through difficulty in accessibility (English Riviera interview, 2011b). Many of those geosites that do not encourage independent access, do however form elements of organised educational or specialist guided tours, which are integrated into the activities around the geopark. The net impact then is that some features of the landscape in the geopark can be incorporated in everyday leisure activities, whilst others are more hidden away and only showcased by specialist professionals for their educational or scientific values.

5.4.4 - Overarching layout of the geopark

In summary the layout of the geopark as projected by the English Riviera Geopark Organisation, is spread across every corner of the territory covered by Torbay Council. The central features are the natural green spaces and coastal strip, which are mostly managed through the Torbay Coast and Countryside Trust. In combination with that natural heritage, are a number of cultural heritage sites, particularly a cluster of museums and art spaces, as typified by Torre Abbey and Torquay Museum, plus the privately owned Kents Cavern that is the most directly geological of these heritage sites.

Beyond those visitor attractions, the geopark encompasses a sweep of over 22km of rugged coastal environment where much geology can be seen in the cliffs and other outcrops. This part of the geopark is where many of the geosites are located which are of considerable significance in historical and scientific terms but for the most part do not present the drama of an obvious dramatic geological feature such as the Giant's Causeway or the Cliffs of Moher. Instead they depend on being brought alive by local enthusiasm and interpretation, and for the geological stories and significance to be interwoven with other facets of heritage or history.

That situation is conveyed as not being of a concern for ERGO, as a geopark is seen by the group as being a real opportunity to create a model that allows the delivery of knowledge and information gently, rather than through a didactic or hard selling message. Hence, rather than geological tourism being the message carrier, in the English Riviera the existing forms of tourism and heritage are used and steered to connect with the influence and impact of geology through many diverse products, events, pathways and trails (English Riviera interview, 2014). Aspects of local

tourism or heritage that become prominent, reflect or are influenced by the overarching policies as devised by Torbay council. However, as we have seen in the chapter regarding the anthropology of policy, what one eventually sees on the ground is not the consequence of 'agentless structural forces' (Shore et al., 2011) but is framed by the groupings that associate together and work to make sense of any particular policy. Additionally it is possible to observe that there are multiple versions of a policy as practiced at different points and locations in both time and space, not least as newly appointed or elected officials arrive in post (ibid.). The next section of this chapter, therefore seeks to present a more detailed case study of the policies that are viewed by ERGO as being significant to the development and on-going formation of the English Riviera Geopark. Consideration will be given as to how the local geopark organisation interacts with and interprets policies not just from their local council, but more widely within the United Kingdom and also with the policy directions as presented from the European Geopark Network and UNESCO.

5.5 - Policy in the Bay

As consistently emphasised in the presentation of the geopark model from those inside the European and Global network (Martini and Zouros, 2001; Frey et al., 2001a; McKeever and Zouros, 2005) and from researchers conducting analysis from outside of the network (Dowling, 2011; Jones, 2008; Farsani et al., 2011), policies around conservation (of geoheritage), sustainable development (of local/regional territory) and education (regarding earth sciences), form the three central pillars of the geoparks approach.

With the model highlighting the essential position of geoparks as a 'bottom-up approach' (UNESCO, 2016a), it is important to consider the manner in which local authorities and communities interpret the policy areas outlined above. In the case of the English Riviera Geopark, the most prominent local issues as identified in key policy documents and through interviews with senior figures in the English Riviera Geopark Organisation (ERGO) relate to:

a) The maintenance of tourism as a central economic pillar to the bay
b) Emergence of the geopark as a tool through which to bring together disparate heritage aspects
c) Create a balance in development and services across the three towns in the bay

The most referred policy documents covering the issues indicated above, during the period whilst my research was conducted, include:

- Torbay heritage strategy 2011
- Turning the tide: tourism in Torbay 2010-2015
- The nature of Torbay: bio-geo diversity action plan 2006

The earlier chapter regarding the anthropology of policy, reminds us however, that policy is not a single reified or material thing (Schwegler and Powell, 2008). Instead, policy when examined through ethnographic methods, seeks to unpack and expose multiple connections and perspectives, and critique the 'taken for grantedness' of the policy process (Shore and Wright, 1997).

'The reason Torbay is a Geopark is because we have an unusual combination of a superb natural setting, rich cultural heritage, a very significant tourism industry and a pressing need to regenerate. The Geopark is based upon and flows from the natural world but it embraces culture, built heritage and economic development where these relate to the natural world. An over-riding principle is that we achieve regeneration in a sustainable way' (Torbay Coast and Countryside Trust, 2008). That clear and succinct description expresses how this particular geopark seeks to present itself and indicate which policy directions converge around the model. But how is this policy statement transformed and realised in the geopark on the ground?

Policy does not follow a linear, logical and hierarchical pathway (Law and Singleton, 2014).Rather it comes to be interpreted and negotiated through myriad interactions and alliances showing complex ways of engaging with policies and different ways of making sense and raising their own questions or perspective (Shore et al., 2011).

5.5.1 - Longevity of tourism around Torbay

When considering such interactions and alliances, it is important to recognise that Torbay has been a prominent tourism resort since the 19th Century. Consequently there are a number of existing and entrenched interests that have been in position a long time prior to the arrival of the geopark concept in the Bay which only began around 2004. Many such interests were based around the traditional week-long family holiday at the seaside. That tourism trade in turn was strongly based around small (4-10 rooms) guesthouses and hotels particularly in Torquay, and

holiday parks of basic chalets and caravans around Paignton and Brixham (Close Focus Tourism Consultancy, 2009). Prior to the 20th Century presentation as a traditional family resort, Torbay had long highlighted its appealing climate, particularly with milder winter weather. Combined with clear sea air, this ensured it followed the Victorian trend for attracting well to do guests seeking out the perceived healthy attributes of coastal spa resorts (Holden, 2016; Beckerson and Walton, 2005). The ensuing combination led to the location earning the nickname of the English Riviera. Although at times this was applied in a slightly tongue in cheek manner, the name was resilient and now along with the associated palm tree logo, is closely identified with the Bay (English Riviera interview, 2014).

A significant and growing interest in tourism relating to the Torquay born crime writer Agatha Christie has also become established. This was given a further boost when in 2009 the Christie's family home of Greenway Estate near Brixham, was opened up to the public by its present owner the National Trust (English Riviera Tourism Company, 2016). A cottage industry has consequently evolved around the theme of Agatha Christie in Torbay. Elements include, an annual festival, literary trails and the promotion of themed 'Agatha Christie breaks' (ibid, 2016). The prominence that 'Agatha' plays in Torbay tourism is not only a response to market demand, but in no small part down to the actions of a few busy and energetic supporters (English Riviera interview, 2014).

Having evolved for more than 150 years, tourism in the bay has also taken advantage of its favourable natural setting close to both coast and countryside in other ways. With good communications and transport access, additional

established segments include maritime activities, annual festivals and events. Furthermore thanks to the presence of a conference centre, alongside wide options for accommodation, Torquay encourages conference and business tourism (Close Focus Tourism Consultancy, 2009). However, with tourism in the 21st century being a global phenomenon connected to a plethora of influences and policies, the conditions within the Bay are clearly not the only factors impacting upon the way in which local policy and development is steered. A long term decline in both the numbers and spend by tourists arriving in Torbay, is one way that reflects the changes that have been occurring in the manner that people book, select preferences or motivations and manage their leisure and holiday time (Close Focus Tourism Consultancy, 2009). In Torbay, those conditions took place alongside local stakeholders who have been managing a mature destination where they were familiar with established forms of tourism. But the diverse interests, and components that formed the tourism offer, came across as being fragmented and not coordinated collectively (English Riviera interview, 2011b). Consequently the linkages and associations required to pool together a common vision were not present.

5.5.2 - Tourism policy and English Riviera Tourism Company

With tourism playing such an important part in the Torbay economy, the further 22% drop in overnight domestic stays across the period of 2005-2007 presented some cause for concern (Close Focus Tourism Consultancy, 2009). The revitalising of the tourism sector thus became a significant priority for the newly created position of directly elected mayor of Torbay. The first Mayor to be directly elected by Torbay residents was Nick Bye, and he set out to address the situation by first

commissioning independent research to fully assess the situation, then based around those research findings, commission and implement a revised tourism strategy (English Riviera interview, 2011b). The new powers invested in Mayor Bye's post, meant that he also had the opportunity to force through recommendations rather than struggle for consensus with officials operating along party political lines within council (ibid, 2011).

One of the most significant actions taken by the Mayor at this point was to re-structure the existing agency responsible for marketing and promoting Torbay region, the English Riviera Tourism Board (ERTB) and launch in 2010 the English Riviera Tourism Company (ERTC). The ERTB although described as a Public Private Partnership (PPP), was largely steered by the semi-public Torbay Development Agency (TDA), and headed by a senior councilor responsible for resident and visitor services in the council. Although subsidised annually by more than half a million pounds from Torbay council, one objective of the ERTB was to move towards sustaining its own budget and eventually make profits. It was also intended to be responsible for leading the delivery of a first tourism strategy, which had been produced internally in 2005 by the TDA (Torbay Development Agency, 2005).

The assessment by Mayor Bye was that ERTB had not been sufficiently influenced or guided by the existing tourism strategy and too little of its budget was directed at promoting the destination (personal communication, 2010). Consequently a tender was called in 2009 and won by Close Focus Tourism Consultancy, with the

new document 'Turning the tide for tourism in Torbay: Strategy 2010-2015' accepted by Torbay council (Close Focus Tourism Consultancy, 2009).

One of the key recommendations in the updated strategy was for the creation of a new PPP company led by the private sector. The English Riviera Tourism Company (ERTC) would be a service to provide more coordinated and partnered tourism management and marketing for the region. It initially retained the majority of the subsidy given by the council, but greater scrutiny would be made of ERTC to ensure there was even handedness across the sector and the Bay, with no favouritism for instance to any particular attraction or group of accommodation providers. Instead its performance was to be judged by key performance indicators such as, an overall increase or decrease of bed nights to the area, and the obtaining of awards in the sector. Funds were to be raised independently from the council by a number of means, including;

- a commission of 5% taken on bookings made through the ERTC website
- ticket sales on events and activities organized through ERTC
- the establishing of a paying promotional partners system - Businesses that participated would then gain exposure through the ERTC website and promotional activities

While the strengthening of coordination and partnerships was to be encouraged in part through a focus on five themes for the destination, labelled 'attack brands' (English Riviera interview, 2011b). The geopark was identified as one of those five themes, and a senior figure from the English Riviera Geopark Organisation became one of the board directors inside ERTC.

In terms of the geopark organisation responding to the policies being generated through the ERTC, aside from having their interests raised through the participation of a key geopark figure on the monthly ERTC board meetings, a further step was taken by devising a series of geopark discovery packages. These were aimed particularly at generating further participation by visiting guests as well as local residents, since the aim of the ERTC is to drive business into the area (English Riviera interview, 2014). Then in 2011 the election of new mayor from a different party political affiliation, impacted upon the direction of Torbay tourism policy. The situation was summarised by one member of the English Riviera Geopark Organisation:

"The incoming Mayor, Gordon Oliver didn't particularly like the old Mayor and so anything the old mayor did you know needs to be taken apart. And one of the things the old Mayor did was to create the ERTC". (English Riviera interview, 2014)

This consequently led to a period of uncertainty when the ERTC was claimed not to be delivering its mandate and was subjected to a phase of new questioning and justification of its actions. One outcome was to re-examine the structure of the ERTC board. All the directors on the board came from the private sector along with two appointed members from the council. The other private sector members didn't necessarily represent any organization or association, rather they were approved because 'they're enthusiastic and they've got a bit of passion about wanting to make ERTC work' (English Riviera interview, 2011a). However, Mayor Gordon was

keen to see that the members of the board were made up of representatives from specific sectors within the community such as the Yacht clubs, the fishing industry, and accommodation providers. He therefore encouraged a chairperson or nominated person of the organizations that manage those sectorial interests (English Riviera interview, 2014).

The fluctuating fortunes of ERTB and ERTC, serve to highlight the bearing which different groupings, interpretations, emphases or alliances can have upon the direction of any particular policy. Nonetheless, by 2012 the ERTC was viewed within the English Riviera Geopark Organisation as:

"doing really well and getting a lot of respect, a lot of respect across the country actually as an organization that's the only example of it in the country – an organization that's funded by the council but that's run by the private sector". (English Riviera interview, 2011a)

5.5.3 - The influence of geotourism

As presented in earlier chapters, each geopark connects with a range of policy communities. When considering how the English Riviera Geopark builds its own interpretation of tourism policy for the territory it covers, the local council or the ERTC are not the only influential set of associations (Law and Singleton, 2014). Another contribution comes from the application of geotourism as specified in the European Geoparks Network rules of operation and charter (EGN, 2015b). Considering the significant emphasis placed upon this component, it is surprising that the charter and other core documents of the geoparks model do not define the

term. Instead it has been left to external interested parties from academia to work towards shaping how it might be considered (cf. Hose, 1996; Martini et al., 2012; Farsani et al., 2011; Dowling, 2011). Out of those deliberations, the definition that is most extensively framed around existing niches and sectors of tourism and development, is that provided by Dowling and Newsome (2010). They suggest it represents,

'A form of natural area tourism that specifically focuses on landscape and geology. It promotes tourism to geosites and the conservation of geo-diversity and an understanding of Earth sciences through appreciation and learning. This is achieved through independent visits to geological features, use of geo-trails and view points, guided tours, geo-activities and patronage of geosite visitor centers'. (Dowling and Newsome, 2010: 4)

However, rather than accepting that definition and tailoring a policy seeking to attract 'geotourists' to the geopark, senior figures from within the ERGO outlined a quite different view regarding geotourism. In the opinion of one ERGO member, the English Riviera Geopark seeks an integrated approach to tourism where geology is introduced alongside culture, arts and other aspects of heritage. Another prominent figure in the geopark management, expressed it more explicitly when recalling a conversation with another UK geopark coordinator,

"Mark has got it bang on really when he said who in their right mind is going to book a geotourism holiday. The reality is you don't go and book a geotourism holiday, you book a holiday". (English Riviera interview, 2011a)

This position was expanded upon by the informant who pointed out that, in their view geotourism works for geologists and people in environmental studies. But it is not a term used by the general public at all. They had no problem with the word being used in an academic context. However, when promoting the packages recently devised to sell through the ERTC, they would describe them as discovery or exploration packages and not geotourism packages. Explaining further, they added that to them the geopark concept is much wider than being just about geology or tourism in isolation. Community involvement and feeling proud of their locality is a big factor, hence

"geoparks are not about protecting the rocks, that's what world heritage sites are about. A world heritage site protects that environment and makes sure it doesn't get ruined or trashed. A geopark makes people get involved, do it, get stuck in and really feel they belong and its their, and they don't want to trash it, that's what a geopark does and it's absolutely right and geotourism is not, it hardly fits". (English Riviera interview, 2011a)

Continuing on this theme, the informant explained enthusiastically that they believe their geopark offers not just concerns about the environment but advances the argument by bringing in different aspects of engagement with the natural and physical landscapes. Through arts, leisure and play and a subtle introduction as to how all is rooted in geology, instead of via a hard lecturing approach. In summation they see geotourism as being just an angle, an aspect of what they offer but not the fundamental way of introducing their geopark.

5.5.4 - Connecting with local council priorities

The English Riviera Geopark's policy of blending together heterogeneous formations of heritage (geological, cultural, natural), challenges the culture-nature dichotomy that is at least superficially seen in the activities of organisations that make up its management structure such as the TCCT. The sequence of different strategy and policy documents commissioned or produced by Torbay Council (Torbay Development Agency/Torbay Council, 2011) continue to highlight the eclectic gathering of heritage components around the bay. But the challenge of coordinating, conserving and using them to collectively support development actions is something that has in the past proved to be difficult for individual organisations or council departments (English Riviera interview, 2011b).

Either directly or indirectly however, the geopark management team views the geopark as being best positioned to introduce and utilise those diverse heritage elements. That stance is reflected in the successful moving of the geopark coordination team, from its original position inside the TCCT (that is responsible for managing and conserving natural environment and green spaces around Torbay), to within Torbay council arts and heritage department (which is active in a much wider range of heritage activities).

A further set of policy associations (Law and Singleton, 2014) that are of relevance to both Torbay council and English Riviera Geopark, are those connecting health, wellbeing and leisure. For the council this comes from an awareness of the

disparities in health and living standards around Torbay, and the ambition to 'enable communities to focus on reducing inequalities and experience good health and wellbeing throughout life' (Torbay Council / NHS South Devon and Torbay Clinical Commissioning Group, 2012).

This is interpreted and manifested in the activities of the geopark in a number of ways such as in the geotourism packages that promote outdoor and adventure events and get residents and visitors active across all areas on land and in the sea around the geopark. But in terms of bringing together ideas, consultation and a local partnership (funding provided by the Big Lottery Community Spaces Grant Fund and Torbay Council), it is most visible through the development and opening in 2012 of the Paignton geoplay area. Located close to the shore, the extensive play park is based around the geological history and heritage of Torbay. With the intention from the side of the geopark being to bring a gentle and subtle introduction to those geological themes and ideas, instead of overwhelming with extensive text or interpretation. Also rather than being imposed through external preconceptions, the format and designs were based around what children and youth from the area were interested in having present, as channelled through the Paignton Town Community Partnership (English Riviera interview, 2011b).

Through the assistance of introductory display panels, the geoplay area is viewed by the geopark management team, as being fundamental in raising awareness about what a geopark is and how it is connected with other sites around Europe and the rest of the world. To support those aims the project around the creation of the geoplay area has additionally conducted sessions for training volunteers to

become play rangers and heritage guides, and also offering opportunities for local residents to sit on a management committee for the park and to help maintain the landscaping (English Riviera interview, 2011a).

As emphasised in article 5 of the EGN charter, the European Geopark network views education as another essential policy component,

'A European Geopark has also to support education on the environment, training and development of scientific research in the various disciplines of the Earth Sciences, enhancement of the natural environment and sustainable development policies'. (Frey et al., 2001a: 28)

For the English Riviera Geopark this is again filtered and interpreted in a discreet fashion and configured in parallel with local council priorities and opportunities. Starting through external lottery funding, a dedicated education officer was recruited and employed through the TCCT to generate connections with local schools and clubs. As is common with such posts, external funding ran for a fixed term only. However, in this circumstance the TCCT took on many of the initiatives generated during that fixed term. Additionally the activities were written so that they didn't become specific to one particular staff member, but could be widened out for any of the trust staff to be able to apply (English Riviera interview, 2014).

5.6 - Network alliances and connecting to other geoparks

As indicated in the introductory description of the geoparks model, a critical element resides in the notion that each geopark does not sit in isolation. Instead as outlined in article 6 of the EGN charter,

'A European Geopark must work within the European Geopark Network to further the network's construction and cohesion. It must work with local enterprises to promote and support the creation of new by-products linked with the geological heritage in a spirit of complementarity with the other European Geoparks Network members'. (EGN, 2011)

Collectively this is enshrined in the obligation for every European geopark to send two representatives to each of the biannual network meetings. Individually each geopark then connects further with article six through their own interpretations, priorities or on occasion via serendipitous meetings or enquiries. Having delivered papers and convened sessions at five EGN and three GGN conferences, it is apparent that a number of ideas for subsequent connections stem from presentations, discussions or questions that arise during the EGN meetings, the annual EGN network conference and the biennial GGN network conference. During those events each geopark has an opportunity to generate awareness of either individual activities, or of joint projects and initiatives involving a sub-grouping of geoparks and sometimes, other external partners.

5.6.1 - Role of European Union funding for geoparks

Many of the subsequent collaborations utilised funding through a range of European Union programmes, particularly LEADER, INTERREG and ERDF, all of

which primarily function to support collaborative and thematic connections across consortia of European regions (Allen, 2010, European Commission, 2015). The European Geoparks Network structure itself grew out of opportunities afforded by such EU funding. That early advantage around collaborative funding opportunities taken by some geoparks, is not necessarily felt evenly across the EGN. In the English Riviera Geopark organisation (ERGO), the perception is that colleagues and geopark consortia on mainland Europe are more astute at successfully identifying funds to help implement geopark and local policies. This was expressed to me by one ERGO board member,

"I think Britain generally is just not particularly good at drawing down funds whereas the Europeans are experts at it. They know how to do it, they know how to play the game, and they are very good at drawing in the money. In fact we've got a project at the moment to try and look at the way the town does draw in European funding and we could be drawing down more money frankly". (English Riviera interview, 2011a)

This comment may reflect the local situation in Torbay and the relative success of that local council, or the broader level of EU project participation by UK geoparks. However, it would be prudent not to generalise more widely as there is for instance a counter perception from other European regions, that local government in the United Kingdom has been disproportionately successful at securing EU funding(Goldsmith and Page, 2010)What these diverging opinions may express however, is the challenge when applying article six of the EGN charter that was originally devised for a network consisting of a handful of individual geoparks, to a

network that by the end of 2015 contained 69 territories. The increasing membership each year of both the EGN and GGN, has an impact on practical arrangements for meetings. For instance it means the meetings now have to accommodate close to 150 people and see the once close-knit round table discussions turning into major events. That has a practical impact upon what can be discussed and achieved in the plenary (CC) Coordination Committee and also on the role or strength of the decisions made inside the steady numbers in the (AC) Advisory Committee (English Riviera interview, 2014).

5.6.2 - Interpretation of a community bottom-up policy

The geopark model has from its beginnings presented itself as an initiative based on steps taken by grassroots community-led approach (UNESCO, 2014 Frey et al., 2001a; McKeever and Zouros, 2005). It is spelt out in article 3 of the geoparks charter in this form,

'A European Geopark has an active role in the economic development of its territory through enhancement of a general image linked to the geological heritage and the development of Geotourism. A European Geopark has direct impact on the territory by influencing its inhabitants' living conditions and environment. The objective is to enable the inhabitants to re-appropriate the values of the territory's heritage and actively participate in the territory's cultural revitalization as a whole'. (Frey et al., 2001a: 28)

Through observing numerous geopark sites and staff first hand, it is apparent that the form of response that takes shape is in part dependent upon the terrain and

localities selected for the subsequent geopark project. Also of influence is the partnership of organisations that comes together, including which institution leads the geopark coordination or which policy directions are most dominant. Informants from the ERGO outlined that across the EGN they could recognise three principle ways in which geopark projects responded to the requirement of having to evolve through a community driven approach.

Attaching onto existing protected area structures

In this category a national park or other level of IUCN recognised protection, is pre-existing. Then through a desire to add another layer of conservation and development by further recognising the geological aspects, that area moves to additionally become a geopark. This is in part because the legal status of geoparks unlike national parks for instance, cannot bring layers of protection. Consequently they require that conservation framework separately and it is best or most easily provided through existing conservation areas, which already have that legal structure around them. Also such structures bring more reliable long-term funding and a pre-existing awareness of the territory. However, because of the different policy emphasis that existing status brings, the colleagues in ERGO felt that such a position can lead to tensions between the priorities set by the geopark network (which aim to bring a balance between conservation, education and sustainable development), and those demanded by the protected area status, where protection and conservation are the ultimate priority (English Riviera interview, 2011a).

Building through not for profit, voluntary or other civil society groupings

A number of geoparks notably in the UK and Ireland are motivated and organised through local community and interest groups. For this approach, the geopark and territory around which it sits are a labour of love. As described by one senior individual in ERGO,

"Lochaber in Scotland and the Copper Coast geopark in the south of Ireland you know are absolutely organised by volunteers, that just do it in their spare time and there's no budget for it really apart from the odd bit from the local authority". (English Riviera interview, 2011a)

Colleagues in ERGO expressed that they feel this also leads to different stresses, with an absence of long-term funding and hence the need to bid on an almost continual basis. Add to this the need to connect to their voluntary force and those two elements occupy a considerable quotidian focus (English Riviera interview, 2011b).

Guidance by local or regional government agencies

The third approach is the one that was chosen to be the one applied by the English Riviera Geopark. In the words of one contact in ERGO they described this process thus,

"We came, we weren't a national park that became a geopark. We weren't anything that became a geopark. We were just an authority with an agency that looked after the trees and the natural environment [TCCT] and we said err actually that would be a really good designation for us, and I think that's why its worked well because

we've created a partnership infrastructure around what is already there. Whereas the others have just bolted the geopark on to their existing structures. So some of these guys run their national parks, and say oh now I'm head of the geopark so I'm going to talk about geology, but I'm still the head of the national park". (English Riviera interview, 2011a)

Although positive about their choice as compared to other approaches to managing a geopark, the colleagues in ERGO did indicate they are realistic that there are still obstacles that they'd like to overcome. One difficulty they highlighted was facing up to the commitment of exchanging knowledge and linking up with other geoparks when their administrative structure currently supports only one full-time person working directly on tasks relating to the geopark management. Participation by "everyone else is volunteering, as they are using the time in their own jobs to contribute towards the geopark" (English Riviera interview, 2011a). Unless further staff cost funding is secured, the irony is that the geopark becomes a victim of its own success. With more exposure, more visitors and increased responsibilities in addition to existing priorities, but an inability to reward time committed to the geopark by individuals or organisations, appropriately. That perspective was starkly framed in this response from one ERGO member,

"We're relying on goodwill the whole time. Then it comes to a point where I may say well frankly I've got better things to do. I don't need to keep seeing you unless you want to pay me, I'm a valuable resource if you tried to pay for me commercially it'd be a thousand quid a day thank you very much" (English Riviera interview, 2011a).

Laid in perspective across a series of visits to Torbay, through meetings with staff in locations outside of the geopark and via web based communications, however, the overwhelming sentiment expressed by ERGO was that certainly there are frustrations with their local structures and administration. But the interpretation of the geopark model they have made remains preferable to other options they've observed. On occasion this stance has been more acutely emphasised and the English Riviera Geopark is singled out as being 'absolutely unique' not just in geographical scale, but in the compact and accessible nature of the political and management setting (English Riviera interview, 2014).

It was explained by one colleague in ERGO, that there was a sense of control over key decisions which impact on the geopark. If a policy position was taken by Torbay council or the elected mayor that the geopark coordination team felt was not ideal for their interests, then there was an opportunity to communicate directly with the mayor or a councillor and maintain the ERGO position. That it was felt, contrasted with other geopark structures, for instance if the coordinating organisation is a protected area where the lines of communication and policy channels are viewed as being more distant or less responsive. As a consequence it was argued this might hinder the chance for the geopark to be consistent with its presentation and policy message. Size in this situation, was considered to be highly significant to achieving an effective interpretation of the model (English Riviera interview, 2011b).

5.6.3 - Organisation of geoparks at a national level

The commitment towards active networking and exchange, as outlined in article 6 of the EGN charter, is additionally expressed at a national level. This hadn't always been the position taken by the EGN advisory committee. Previously it was considered that a strong transnational alliance of geoparks was preferable over a structure in which it was considered that national interests might be seen to take a lead ahead of the overarching priorities of the geopark model (English Riviera interview, 2011b). But with the continuing growth in numbers of geoparks in the network, and since 2010 a burgeoning emphasis upon gaining full recognition of the model within UNESCO, it was agreed in the coordination committee of the EGN, that the creation of national geopark committees would be the most effective method in;

a) Controlling and overseeing a waiting list of a maximum two new geopark applications in each country where geoparks are present
b) Forging an active and positive relationship with national UNESCO commissions to ensure they were aware and positively disposed towards the geoparks model

In the United Kingdom, the establishment of a national structure for geoparks is further complicated by the situation that certain policy issues are covered at a UK political level, such as the representation to UNESCO through a national commission. Whilst other policies, such as around the management of the natural environment, are the responsibility of a number of agencies (i.e. Natural England, Scottish Natural Heritage, Countryside Council for Wales, Northern Ireland

Environment Agency), that are devolved to the member countries of the United Kingdom.

Even when a collective position was found to overcome that complication, the UK geoparks arrived at a situation where the lack of funds to facilitate travel and joint meetings, meant the process was slow to be initiated. However, for the moment the benefits of circulating to each geopark in the UK, and seeing and sharing experiences first hand in a small and manageable group, are outweighing the difficulties of securing a budget to travel (Marble Arch Caves interview, 2015).

5.6.4 - Bridges beyond Europe

From 2004 onwards, the formation of the Global Geoparks Network (GGN) allowed delivery of the model outside of its European boundaries. In so doing, it opened up the possibility to forge linkages and alliances with existing or aspiring geoparks from around the world. Having been active and promoting the model through established events such as the EGN conference, geoparks from outside of Europe often sought to make contact with EGN members. This was commonly conducted in one of two different circumstances. One was to learn and take tips from perceived best practice by aspiring geoparks seeking to enter the GGN. The other situation was when existing geoparks sought to connect along thematic or policy lines, for instance if they shared geological or developmental issues and concerns, or had an opportunity to jointly collaborate on a project.

In the case of the English Riviera Geopark, one prominent alliance had both of these components present. Initially Hong Kong geopark contacted the ERGO when

it was in its developmental phase aspiring to become a member of the GGN. English Riviera Geopark was selected as a sister organisation as at the time it was the only geopark placed within an urban developmental setting. Additionally both sites were in coastal localities, and sought to incorporate their marine and maritime features into the actions of their respective geoparks (English Riviera interview, 2011b). Visits were made first by staff from ERGO to Hong Kong and then the senior management from the Hong Kong geopark made a return visit to Torbay. As a consequence, an official memorandum of understanding was completed between the two management organisations.

ERGO expressed that their aspiration was to ensure the link generated realistic project and business links and not just the familiar handshakes and photo opportunities of twinning relationships they had observed often before (English Riviera interview, 2011a). For that reciprocal type of relationship to occur, the ERGO board acknowledged that each partner would be required to input both financially and in terms of knowledge or information transfers. Once the newcomer has attained GGN status, however, there is less incentive to generate active partnerships. The relationship remains congenial, but the tangible outputs have been limited to a few further exchanged visits of management personnel, in addition to some joint online educational activities where schools in both locations have been linked together to conduct virtual classes regarding earth sciences curriculum (English Riviera interview, 2014).

5.7 - Policy around the revalidation method

The adoption of a peer-review system to assess initial validation for membership to the EGN, and then a subsequent four yearly review or revalidation of that application, is one of the most impacting facets of the geoparks model. On the ground in the English Riviera Geopark I visited and communicated with geopark staff at different points before and after revalidation missions look place in Torbay in both 2011 and 2015. The actual 3-5 days during which those missions take place, are conducted behind closed doors for all but the most central protagonists in the geopark organisation, and the two evaluators themselves. This is in part because of the degree of organisation and nervous energy around the mission (from both sides), who wish to focus upon their work at hand. But also because of the objective and scientific manner in which the mission seeks to be conducted. That process is conducted around a self-evaluation section of forms drafted by the geopark being visited, and a subsequent evaluation section completed by the two evaluating geopark assessors (English Riviera interview, 2011b).

Although inducing anxiety amongst those staff most closely involved in the management of the geopark, not least through the greatly increased workload demanded in the lead up to the missions, the rationale behind the revalidation process was acknowledged and appreciated on a number of levels by ERGO staff. They demonstrated how the focusing of minds around completing the revalidation forms and planning the re-validation mission, allowed ERGO to step back from its day to day preoccupations and think more strategically about how it was fulfilling its objectives. One member of ERGO explained how they considered the process "served to bring the geopark management group closer together, because there

was this strong deadline to work towards and not place issues on the back burner" (English Riviera interview, 2011b).

A number of facets were highlighted to me by those staff, that demonstrate how the geopark approach is filtered, including which functions the English Riviera Geopark sees as being of significance for their operation, and what they interpret the EGN considers as being essential for a geopark to manage itself effectively. Certain key words were particularly prominent and reiterated in interviews around revalidation time. These were 'consistency', 'visibility' and 'balance'. ERGO explained and contextualised those terms. Outlining for instance that the geopark sought to be consistent, through being clear and delivering on the policies that it describes in its literature or on its website. For example when publicising the geotourism discovery packages, they looked to ensure that presentations or promotions delivered in other sites and by other geopark partners such at the English Riviera Tourism Company (ERTC), connected logically and were consistent with materials generated directly by the geopark organization (English Riviera interview, 2011b).

Particularly in the period leading to their first revalidation in 2011, there was a concern regarding how visible and understandable the geopark was to residents and visitors. This was expressed in terms of the lack of signage and interpretation that could be directly seen as being an intervention or having been placed by the geopark. But also in concerns that one of the geopark partner institutions in the management structure, lacked information and materials relating to the geopark. Then in terms of 'balance', ERGO was eager to show how they placed a strong focus

upon bringing what they described as an integrated approach. That is linking the local geology with history, heritage and culture and bringing equal emphasis to the conservation, education and sustainable development commitments of the geopark model. In practical terms this was expressed in areas they viewed as relative weaknesses when responding to the self-validation questions. One area in particular that was highlighted was an awareness that their consortium did not employ a full-time qualified geologist who could particularly contribute towards the educational and geo-conservation aspects of the geoparks work.

The response at the time to this issue, was to create a panel of experts who could support the coordination team. As well as fulfilling the needs of the re-validation process, the 14 person panel of local and nationally recognised earth scientists, became tasked with reviewing research proposals, highlighting research potential, assisting with interpretive work, advising on educational development and acting as ambassadors for the geopark within the academic world. One of the group, Professor Iain Stewart, agreed to act as patron of the English Riviera Geopark. This was seen to be particularly valuable as Professor Stewart as well as helping strengthen connections with nearby Plymouth University, has also become the public face of geology in the British media having written and presented on a number of television series relating to earth science for the BBC. Hence he is able to contribute in raising awareness around the geoparks approach both locally and more widely across the UK (English Riviera interview, 2014). A member of ERGO added further that the revalidation became a moment when the geopark could consider how to balance policy commitments and responses for both their local authority and the demands from the EGN.

5.8 - Formalising the relationship with UNESCO

As presented in greater detail during the introductory chapter, geoparks have conducted a close relationship with UNESCO earth sciences department from the early days of the model (UNESCO, 1999, Dingwall, 2000). The initial exchanges, debates and research conducted between 1997-2001, introduced a range of ideas as to where and how a potential Geoparks Programme might be accommodated into UNESCO structures. This culminated in the delivery of a feasibility study to the 161st executive board of UNESCO. The study's recommendations were accepted by the UNESCO executive board, and the decision to follow what was described as an 'ad hoc' relationship was pursued (UNESCO, 2001; UNESCO, 2000). But as the network grew and succeeded in expanding far beyond its initial European cluster of territories, the geopark model evolved and consequently an increasing number of governmental and non-governmental agencies recognised the benefits and distinct approach of the geopark networks (UNESCO interview, 2009). It was also considered by the EGN in particular, that the communications between UNESCO and the geoparks network during that first attempt at incorporation within UNESCO, had not been as comprehensive as desired (UNESCO interview, 2009).

The continuing lack of clarity, or ease in explaining the relationship between geoparks and UNESCO, became a widely discussed issue inside the EGN with particular concerns expressed that the uncertainty regarding geoparks status was impacting upon awareness of the model by the general public and infringing on further opportunities to secure further project funding (English Riviera interview,

2012). That situation was expressed by one senior figure from the English Riviera Geopark Organisation, who explained to me that,

"You can't call yourself a UNESCO Geopark because there is no such thing, it's actually you are the English Riviera Global Geopark as endorsed, as acknowledged, or under the auspices of UNESCO". (English Riviera interview, 2014)

As a response to those emerging concerns, a momentum grew for the geoparks network to move towards a second attempt at gaining full recognition within UNESCO. This was conveyed in particular during the EGN conferences that I attended in the period between 2009 -2015. One strategic reaction from the Advisory and Coordination Committees of the EGN was to encourage the formation of national geopark forums in each of the countries that had a number of existing and aspiring geopark projects. These forums operated with two central functions. One was to control the increased flow of new candidate applications to a maximum of 2 bids each year. The second function was to provide a coherent channel of communication with each respective national commission for UNESCO. This created the most efficient pathway through which to deliver the geoparks lobbying position to be forwarded to the executive structures of UNESCO at its headquarters in Paris (English Riviera interview, 2014).

In the United Kingdom, representatives from the English Riviera Geopark had a strong role in the emergent UK geoparks forum, with the English Riviera Geopark coordinator being first vice-chairperson and then later on chairperson for that forum. They were also active in supporting an initiative first devised within Devon

County Council, to strengthen links between sites in the South West of England, belonging to the other UNESCO managed programmes, World Heritage Sites and Biosphere Reserves. One outcome of that initiative being the firmer embedding and acknowledging of geoparks within UNESCO structures (English Riviera interview, 2011b).

However, this second move towards becoming a full UNESCO programme was not met without a certain amount of reflection. Although contacts in ERGO acknowledged that their vulnerable position through an overall lack of funding meant that to grow in the future, a full connection with UNESCO was their most reliable answer, there was a recognition of the changes such a linkage would bring. A senior figure within ERGO described how,

"It sort of dawned on everybody in the EGN that what we've created with the geopark network, is very fluid, two representatives, from each geopark meeting up regularly you know controlling our own destiny. Having our own rules, setting our own rules about revalidation, you know, very nice, very fluid, very transparent and very dynamic. If you, if the network becomes a programme of UNESCO instantly you lose all that and it suddenly becomes embedded within the country, the UNESCO commission, the High Commissioner for UNESCO in the UK ends up being responsible for geoparks. So that it becomes very political and suddenly you've lost all that excitement". (English Riviera interview, 2011a)

That assessment of the possible changes for both individual geoparks and for the network as a whole, was somewhat born out at least on paper, in a policy report

authored by the UK national commission for UNESCO. The report, which involved the close cooperation of the UK national geopark forum, was strongly supportive and encouraging that 'UNESCO's relationship with Geoparks should be formalised under an international Initiative' (UK National Commission for UNESCO, 2012). But it forewarned that in terms of governance, 'Full UNESCO branding, as allowed through a UNESCO initiative or programme, must include a commensurate increase in UNESCO oversight' (ibid, 2012: 8).

Regardless of any doubts or anxieties about what a new relationship with UNESCO would bring, the momentum inside the EGN and individual geoparks like English Riviera, was fully towards a coordinated policy of bringing the geoparks network within the UNESCO fold. Increasingly over the period from 2010 – 2015 although day to day running of the geopark continued, the dominant policy focus was on claiming the prize that had slipped through the hands of the network in 2001.

5.9 – Conclusions

The rapidly expanding geoparks model has evolved with an intention of embracing responses to territorial development inspired by their geological settings and human interventions on those territories (Martini, 2000). Through periodic and longitudinal research and observations, this chapter has considered how the diverse policy directions of the geopark model, which are condensed in the form of the geoparks charter, have been interpreted and filtered on the ground and how those actions are manifested in the area of the English Riviera Geopark. It has been seen that the compact size of the English Riviera Geopark, is matched by a desire to

be managed through a concise organisational partnership. One of the reasons for this, as expressed by staff in the ERGO, is to seek to retain control or influence with regards to the direction of this interpretation of the geopark model (English Riviera interview, 2011a).

Having been guided around the landscapes around Torbay by ERGO staff and observing its sites and features independently, it is apparent that the English Riviera Geopark predominantly utilises existing features which are selected across the whole territory which overlaps exactly with the political boundary of Torbay unitary council. Those feature a mixture of, physical, natural and cultural heritage, ranging from historic buildings and coastal headlands to an underground show cave attraction, are then delivered and presented by the relatively new management structure of the English Riviera Geopark. From reading key planning and policy documents and through interviewing significant stakeholders, it became clear that the sites highlighted through the geopark were set within a context of existing infrastructure, stakeholder groups and organisations, and policy approaches.

In addition to the English Riviera Geopark being recognised by the EGN in 2007, that year also saw the arrival in Torbay of a new political structure whereby local residents voted for a directly elected mayor to lead the unitary council. The evolving, fluid and dynamic influences of that mayoral position were visible particularly in the manner in which policy around tourism and heritage has transformed. What this chapter has shown in particular when looking at structures such as the English Riviera Tourism Company (ERTC), is how observing through

the lens of the geopark, we can see the distinct flows generated by different associations and heterogeneous policy interpretations (Law, 2013). Through observing and interviewing key personnel in the English Riviera Geopark Organisation (ERGO), it has also been possible to consider the processes that influence policy around local conservation, education and well-being. In particular interviews have highlighted how ERGO has used the placing of multiple linkages into Torbay council, within the newly created ERTC, as well as connecting with other business development boards, to ensure that the English Riviera Geopark is recognised and its views heard and acted upon.

The chapter has also outlined the processes through which policy moves from the European Geoparks Network and its most influential document, the EGN charter (Frey et al., 2001). The six articles are each engaged with by ERGO. The positions taken by ERGO in relation to those articles, are subsequently informed by what is seen through their connections with the geoparks network in its regular meetings and other methods, as well as with its associations to the unitary council and other partners in its organisational consortium: for example the manner in which ERGO interprets community connections and a bottom up approach, travel through a combination of new and existing governmental, business and civil society linkages. This is achieved principally through local and nationally sourced funding, alongside a significant amount of voluntary services. It has been highlighted that wider connections with other geoparks in the EGN in the form of practical projects, are often facilitated through European Union funding. That channel however has not been frequently accessed by ERGO. Similarly, connections have been made with an ever broader sphere of geoparks from outside of Europe. It has been

shown that relationships with those geoparks, such as with the Hong Kong Geopark, have served initially to help in transferring knowledge and supporting the expansion of the model to include new geopark localities. Once such sites have moved to become actual members of the Global Geoparks Network (GGN), then without direct project funding opportunities, the relationship takes a lower profile to the more pressing day to day priorities of the geopark.

During the period of fieldwork in the English Riviera Geopark and through communications with senior staff members, the most significant policy activity however, has been seen to form around the drive from the EGN's coordination committee, for geoparks to be a fully acknowledged programme within UNESCO. In observing that process through ERGO, it has been possible to see how the emerging UK geoparks forum was a vital pathway. English Riviera Geopark has participated actively within the UK forum structure and played its part in creating a new partnership with the UK national commission for UNESCO. That relationship has been seen to change the perception and understanding of the geoparks model within UNESCO. But equally it was observed that the closer involvement with national and trans-national structures could be transformative for the geoparks model.

The English Riviera Geopark has shown how many choices and filters can be used in the process of formulating how a geopark may be organised and in turn visualised on the ground. The next case study of the Katla Geopark in Iceland, looks at the same six defining articles of the EGN, and considers how a quite different

physical and political territory, organised around another management structure, interprets or is steered by them.

Chapter 6 - Case study of Katla Geopark, ICELAND

Connected and committed to Suðurlands

April 2014

We are passing through a stark and squat landscape, as the smooth surface of the N1 Ringroad moves through the rugged contours of pitch black lava field for kilometre after kilometre. It appears to be alien and quite disturbing to some on the bus, but instantly familiar to my eye, a geologist's eye, I see the contorted and fractured shapes of rubbly basalt. At the front of the minibus, narrating and helping to navigate our journey through this floe, called the Skaftárhraun, is Runa. She is a farmer's daughter, a tour guide, and now a 'geoparkian' helping visitors like those on the bus connect with her corner of Katla geopark. Hers is another eye that is acutely familiar with the dark profiles of the flow, topped in many places by the more gentle crowns of rich green moss. "This is where the lava from Laki errupted in 1783. Following the paths of the rivers, it grew and grew till it was almost upon my village". The tone and ease of her voice, with the richness and diversity of her descriptions switching between earth stories evoking deep time and human experiences that have either been passed down by forefathers or others that are directly witnessed, immediately demonstrates a deep and grounded connection with this locale. The passage through this area before the road was built, acted as an eery backdrop providing rich material for tales, stories, mystery and danger. Fingers of rivers, moving, babbling, unstable paths inbetween those rocks. Changing. Shifting. Unsettled. Our guide tells us how her grandmother explained the lava flows here are replete with Huldufólk – the hidden people that every Icelander hears about, and some claim to have seen. Turning around to her audience, our guide smiles as these characters are mentioned. It is to inform us simultaneously 'of course you won't

believe these tales' – 'but I won't be surprised if you hear some unexplained sound whilst you are taking your selfies when we stop at the geosite signage that "explains" the geology of this shadowy terrain'.

After more than two hours on the road the scenery begins to change at last. Black lava gives way to an escarpment, even small glades of trees are growing here, and a thin ribbon of water cascading down the cliff. At the base a loose spread of modern buildings. Houses, a couple of shops, offices and the visitor centre which is where we are headed. We've escaped the lava, and arrive in the principal town of Skaftárhreppur municipality, Kirkjubæjarklaustur. "Don't worry" explains our guide, "we just call it Klaustur! ". Another warm beam lights her face. The transition between icecap, volcano, lava field, village, shelter and pastures for sheep and horses., offices for work. All are presented to us by Runa, not from a script but from her direct experience, from her memory and from breathing, walking, driving, living the landscape.

Runa mentions how a couple of summers ago she spent a breathless season with the National Park authorities at the nearby Vatnajökull park. "It was non-stop! In and out of the visitor centre. Taking people up to the glacier tongues, or over to Jökulsárlón, the ice lagoon where we'll be going later in the afternoon. They've filmed two Bond movies over there. Not one, two!". It was during the seasonal job at the National Park, that was where Runa learnt to refine and interweave information about the heritage of this region in all its forms. Describing scientific detail about the volcanoes and icecaps, the birds and fish, but also introducing the people - her family's farmstead, its patterns, the seasonal flows, those tales of Huldufólk passed on

by her grandmother. "Those other explanations and the ups and downs, literally, of life around Klaustur, these can then bring you to understand the real excitement and joy that is experienced in the autumn. When we bring the animals down from the rich pasture of the highlands. Everyone together, everyone's livestock together, for the roundup and dividing out amongst individual farm owners, we call it the Rettír. It's hard work but it's a big party too!". The full realisation came during that summer, visitors really are inspired by her and her colleagues' connections to Suðurlands. One of the other visitors on our bus mentioned that it's one thing to be on a tourist bus passing through this territory, looking out at the seemingly other world features not sure if you're on a film set. However, it becomes another experience altogether to be taken by the hand, reassured and charmed by a son or daughter of this land. Runa is determined to make an opportunity grow for herself, and to pass on at least the beginnings of how and why she is so deeply connected and committed to this remarkable place that was almost swept away in a sea of lava over that tempestuous summer of 1783. Although her studies took her to Reykjavik, it is here she calls home. She wants to make a livelihood around these familiar features. Runa is still getting to grips with the geological descriptions and understanding terms like 'geopark' and 'geoparkian'. These are new to her. But she's very comfortable as a resident of Klauster and a guide amongst the riches in its landscapes.

6.1 – Introduction

This chapter is the second of three case studies examining how an individual geopark site responds to the combination of local, national and geopark network

based policy influences. Similar methods for gathering information are employed here, as those used in the English Riviera Geopark case study of the previous chapter. Interviews with the geopark staff provide a central core of data, both on site in the geopark and away from it during geoparks network events on the European and global stage. That data was complemented with further participant observation in Iceland and when Katla Geopark was presented during other geopark events and conferences.

As the territory in Katla was less immediately accessible than the English Riviera Geopark in England, I also drew upon information gathered during more collaborative work conducted with staff from Katla Geopark. One approach was by way of drafting and delivering joint presentations for European and Global geoparks network conferences (GGN in Canada, 2014 and EGN in Finland, 2015). The exchange of ideas during the construction of these presentations, allowed for an understanding as to which features, and how Katla Geopark conveyed itself to an audience outside of the locality itself. Additionally through working alongside Katla Geopark staff on one further funding bid, I was granted the opportunity to view how and with which organisations the geopark generated collaborative linkages both inside the EGN and beyond that network. These approaches are explained in greater detail during the chapter outlining my research methodologies.

6.2 - Why Katla Geopark as a case study?

Katla Geopark in Iceland was chosen for a case study on the basis of a number of parameters that contrast from the other two sites selected. Firstly I wished to consider a geopark that was located in a rural environment and faced with the challenges of outward migration and depopulation that were emblematic of the type of circumstance highlighted by the geopark model when first established (Martini and Zouros, 2001). The small consortium partnership used by Katla Geopark was also attractive when I was identifying suitable cases, since this could mean more immediate access and understanding of the management structures and how these tied into policy at a variety of levels. As I was restricted by my limited linguistic skills, the widespread understanding of English in Iceland also became an influencing factor. Thirdly, this Icelandic example was included due to the presence of the more directly visible and stark geological and volcanological features in the South of Iceland where Katla Geopark is located. Drawing from these landscapes, the intention was to consider how the presence of more prominent geosites might be significant in making more direct conclusions regarding the role of the geopark model in the organization of geotourism locally.

6.3 - Aims of the chapter

Building on ethnographic data generated between 2014 and 2016, the aims of this chapter are to present the case study of how the Katla Geopark organization interprets the geoparks model on the ground. In particular I consider how the relatively loose management structure chosen in Katla has been a factor in shaping the way in which the geopark was able to respond to its policy objectives.

The second purpose of the chapter is to look more deeply at the consequences of policies and events that lie beyond those that are immediately identified by the management team, and which shape their main objectives. These can take the form of political changes occurring at the local, national and international level. In Iceland during the period that fieldwork was carried out for example, the change of government and subsequent alteration in its position to the European Union and pre-accession talks is considered. Consequently the chapter examines the impact such shifts had upon the direction and organization of the geopark and how it impacted upon more long-term relations with the geoparks network and other external project partners.

During the fieldwork period, Katla Geopark received a revalidation mission from the UNESCO geoparks network and was subsequently given what the EGN describe as a 'yellow card'. This means that the Katla Geopark organisation has two years to address the issues and shortcomings identified in that report before a further revalidation mission is received (UNESCO and IUGS, 2016). At that point if the geopark is considered to have adequately responded to the problems listed, then it can progress with full membership of the EGN for a further four years. If however, the responses were to be considered inadequate, then the geopark immediately looses its membership and status as a UNESCO global geopark. This case study therefore provides an opportunity to access how the prospect of withdrawal of membership to the EGN effects the manner in which the geopark is managed and reinterprets the geopark model per se.

When making its own evaluation and conveying an overarching philosophy or motivation for becoming a geopark, Katla Geopark identified that,

'The ultimate aim of the project was to create jobs for people with academic degrees in order to encourage them to move back home after their studies'. (Katla Geopark Project, 2010)

This statement of intent was driven primarily by needs identified from two of the central partners in the geopark project, The University Centre of South Iceland and The Development Centre of South Iceland (Katla interview, 2015b). It presents as being somewhat less complex than the aspirations outlined by the English Riviera Geopark. This chapter therefore, seeks to assess how the approach by the Katla Geopark organization is manifested on the ground and how it has sought to integrate with the other components and obligations as outlined in the geoparks charter.

6.4 - Backdrop to the geopark territory

Katla Geopark is set within a substantial territory lying across the southern section of Iceland, approximately 2-3 hours drive by car from Reykjavík. Due to its remote rural setting, limited population and reliance on the resources of central government, it is helpful first of all to situate the geopark within the wider context of Iceland itself. Situated in the North Atlantic, Iceland has a population of 326,000 approx (1st January 2014, according to *Statistics Iceland*) and a total area of 103,000 km2 (40,000 sq. mi), making it the most sparsely populated country in

Europe. Two-thirds of the country's population live in and around Reykjavík, the largest city in Iceland and the most northern capital in the world.

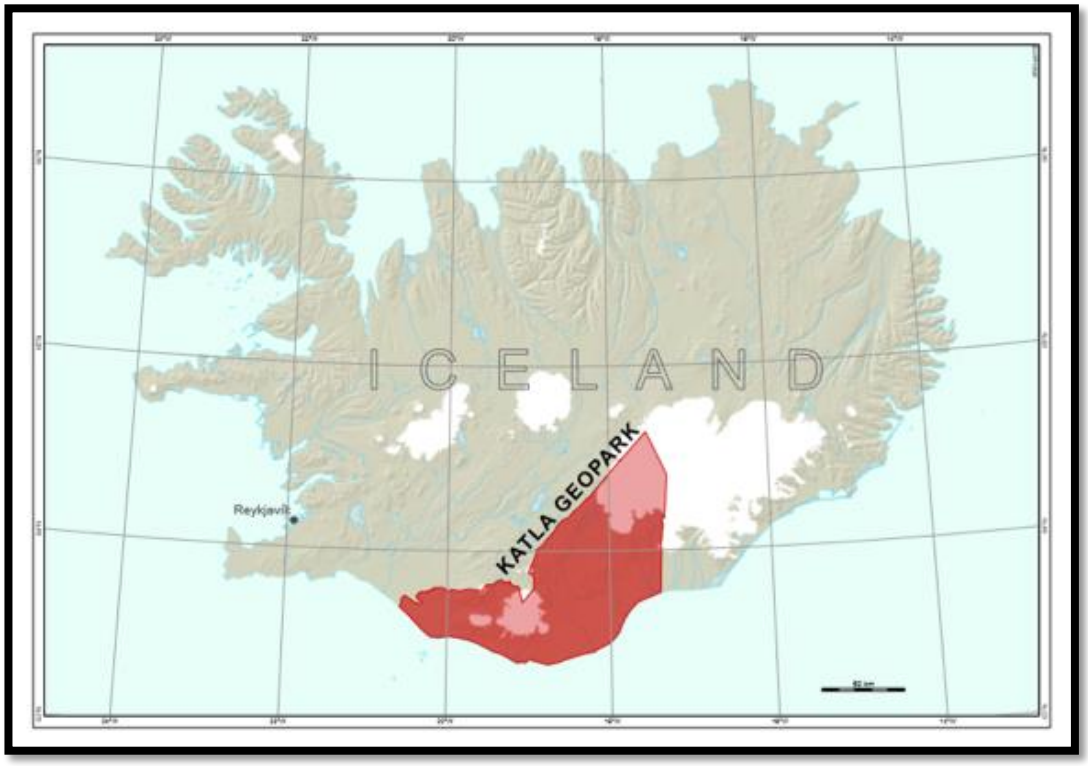

Figure 13 - Location of Katla Geopark (Katla Geopark Project, 2010)

From a traditional economy based throughout much of the 20th century on agriculture and fishing, Iceland's economy is now predominantly service based. The export base is relatively narrow and largely based on natural resources, including fisheries, energy intensive industries, and tourism. Small and medium-sized businesses predominate. Iceland has on the whole made a rapid recovery since the collapse of its banking sector in 2008. Unemployment stands at around 5%, and Iceland enjoys one of the highest per capita incomes in the world (Jóhannesson and Huijbens, 2013).

In many regions of Iceland, fishing has remained a prominent contributor to the local economy and culture. In the stretch of coast around Katla Geopark however,

the dynamic volcanic, fluvial and erosional processes have meant that the coastline is continuously on the move. When volcanic activity intensifies, the area is then subjected to flash floods locally known as jökulhlaups, which lead to a change in river profiles and if water volumes are significant enough they often wash away sections of road, bridges and other facilities. As a further consequence of this topography, there is little safe grazing land for livestock in the lowland areas

For instance, following the 1918 eruption of Katla, the coast around Vik was extended by several kilometers, leaving former islands such as Hjörleifshöði landlocked several hundred metres from the present shore line (Katla Geopark Project, 2010). But even more impacting is the situation that there is no longer a natural harbour to allow fishing or other vessels to dock. As a consequence, the fishing sector for this part of the country is situated entirely in the small cluster of islands of Vestmannaeyjar, situated several kilometres off the southern coast. This setting of an agricultural sector limited mostly to highland areas, opportunities for fishing restricted to the offshore Westmann islands, and a falling population, have meant that in the past decade an emphasis has been placed more strongly in South Iceland, around opportunities brought by tourism.

6.4.1 - How Katla Geopark presents its structure

The following section is generated from interviews, internet based documents and other observations I made during three field visits and long-term engagement with geopark staff online between 2013 and 2017. The Katla Geopark project was launched in 2008 around an initiative coordinated through the University Centre of South Iceland (Katla interview, 2014b). The active volcanoes and volcanic

features which dominate the southern corner of Iceland, were identified in particular through a report by geologist Lovísa Ásbjörnsdóttir, as potentially forming the core of a future geopark (Katla Geopark, 2016). In local political terms, this brought together three municipalities; Skaftárhreppur furthest east, Mýrdalshreppur in the middle and Rangárþing eystra in the west. In all this gave an administrative area of 9542 km2 (around 9,3 % of Iceland), and a total population of around 2700 residents. The volcanic activity of Eyjafjallajökull, Katla, Lakagígar and Eldgjá and its widespread effect on the landscape in the area provide the geological basis for the Geopark but the territory selected follows the administrative borders of the municipalities.

Over a period of two years between 2008-2010, a committee drawn from the three municipalities listed above, alongside the University Centre of South Iceland (UCSI), the Development Centre of South Iceland, plus the University of Iceland´s Institute of regional research centres, coordinated an assessment of the potential and the steps required to establish a geopark in the region (Katla Geopark, 2016).

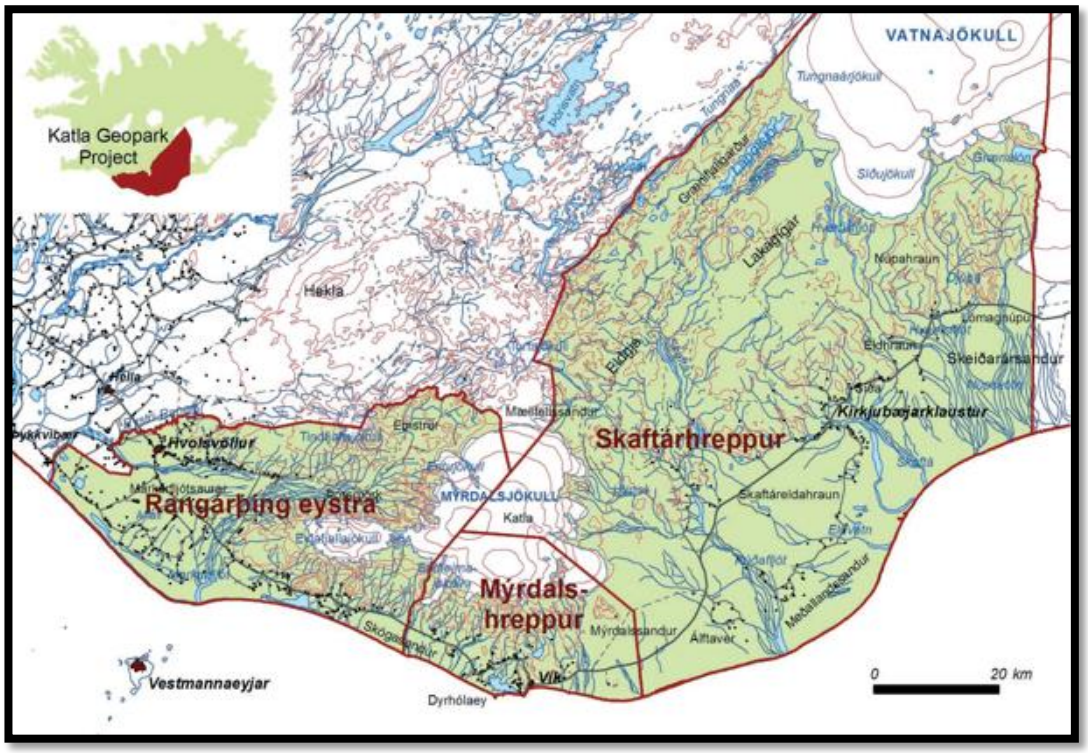

Figure 14 - Map showing border (red) of the three municipalities in Katla Geopark (Katla Geopark Project, 2010)

6.4.2 - Political partnership and management

Coinciding with the submission of the application to formally join the European Geoparks Network, Katla Geopark Project was officially established on the 19th of November 2010. Based upon research by the Katla Geopark project committee, conducted both locally and through observing other geoparks in the EGN, it was decided that the management structure of Katla Geopark would be as an autonomous independent corporate body (Katla interview, 2014b). Its mission and aims are cooperation among all of the founding partners (the three municipalities; Kirkjubæjarstofa research and cultural centre; Skogar museum; Katla Centre in Vik: University of South Iceland; University of Iceland's Institute of Regional Research Centres)[3] with the aim of sustainable development of the whole territory

[3] See http://www.katlageopark.is/partners/

in the field of Geotourism, together with the preservation of natural and cultural values. The partners regard it as important for the whole area that conservation and economic benefits are not conflicting aspects, but a holistic strategy for the area as a whole (Katla interview, 2014b).

The partnership structure was diagrammatically presented in the application form that the geopark made to the European Geoparks Network in 2010.

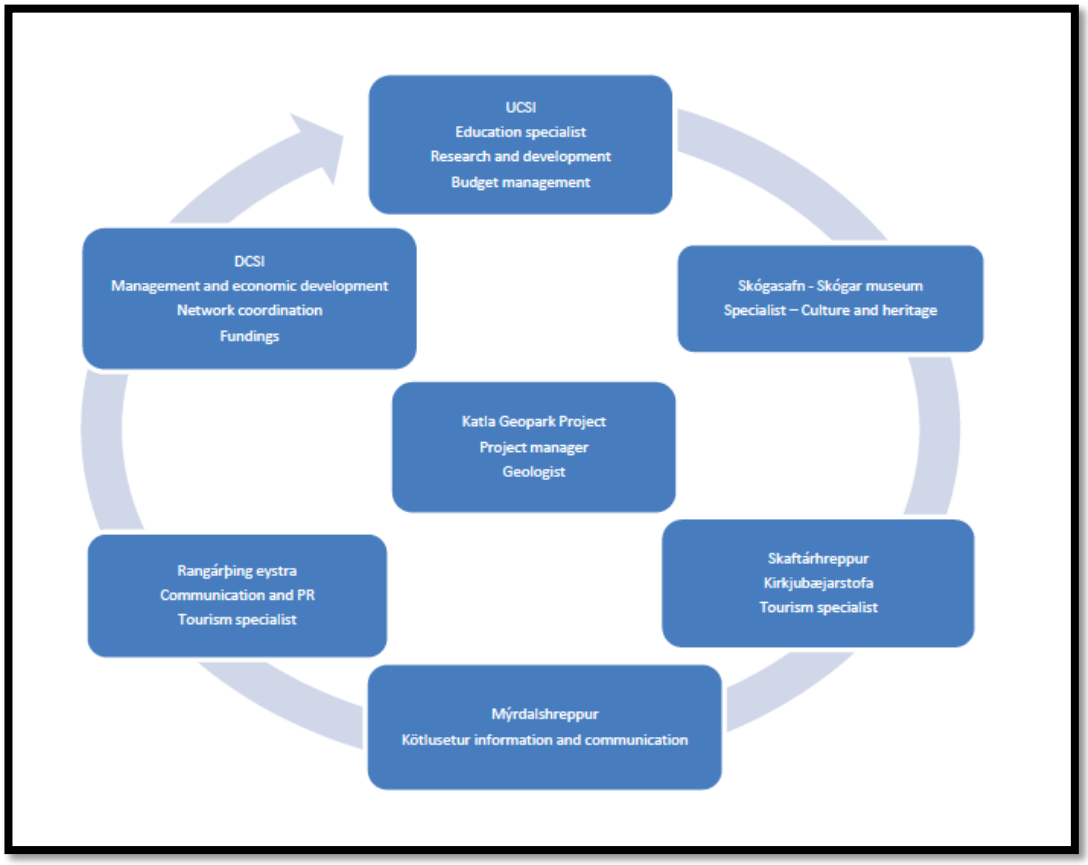

Figure 15 - Katla Geopark organisation (Katla Geopark Project, 2010)

However, a dedicated management plan for the geopark project which would guide how the structure could be applied in practice, was not established at this moment in time. It was instead decided that the development of the geopark would

be initially based around the individual master plans for development that were created by each of the three member municipalities (Katla interview, 2014b). As outlined in the geopark application form of 2010, the management is variously described at different points as 'an autonomous independent corporate body', 'an association', and 'a private non-profit institution' (Katla Geopark Project, 2010). This lack of consistency as to the form with which the management of the geopark would take, shall later be seen to have significant consequences.

With the absence of a long-term and discrete structure for managing the strategy and funding for Katla Geopark, it was necessary to expand upon the limited resources that the three municipalities could deliver to the project (Katla interview, 2014b). The financial situation in the region had already been severely impacted by the economic collapse of 2008, the subsequent austerity budgets and change in government (Jóhannesson and Huijbens, 2013). But then a further impact came with the eruption in April 2010 of Eyjafjallajokull volcano, and the necessary reallocation of funds to support recovery from that event.

In the midst of these circumstances however, a new opportunity and short term solution to financially sustain the geopark arose through the decision by the Icelandic government of Jóhanna Sigurðardóttir to engage in talks to lead the Republic of Iceland into membership of the European Union. Part of the process leading up to membership, the EU releases bilateral funding entitled Instruments of Pre-Accession (IPA) and from 2010 the Icelandic government began to receive these funds. In 2011 one of the geopark consortium partners, the University Centre of South Iceland, bid and succeeded in securing one of the seven grants distributed

that year, for a programme of activities titled “Katla Geopark: Regional development for the Eyjafjallajokull area” (Katla interview, 2014b). For the next two years, the strategy for the geopark was consequently directed by the immediate objectives of the IPA project. However, the geopark was to receive a further shock when in 2013 a new coalition government was elected in Iceland and chose to place accession negotiations on hold leading to the phasing out of IPA funds to the country after only two years (personal communication, 2014).

The political and economic fluctuations described above, have had an influence on what Katla Geopark has been able to fund and achieve. The next section thus looks into how the geopark development is currently manifested on the ground. With some partners playing a more prominent role in both the day to day and more strategic managing of the geopark, it is useful next to consider too, how the geopark is understood by different residents and groups that live and work in the territory. With a looser management structure, is the vision for the geopark shared by the different interest groups such as farmers, public workers and private tourism enterprises?

In a similar manner to the data gathering approach taken when observing my other geopark case studies, I undertook several short visits to the South of Iceland ranging from three to ten days each time. These fieldtrips were used to conduct participant observation and to meet and interview existing and former staff members from the Katla Geopark consortium. Again I allowed these colleagues from the geopark management organizations, to guide me to the sites and people they viewed as being significant, and to present interpretations as to how Katla

Geopark should be seen, by those guides and residents that we met. The research in the 'field' was complemented by web-based information and resources particularly from the geopark's website (www.katlageopark.com), plus additional exchanges with the same staff via skype calls and questioning that used online platforms including Facebook messenger and the WhatsApp texting application. These techniques allowed for an in depth and longitudinal study of the geopark beyond the brief periods spent physically in the fieldsite.

6.4.3 - What Katla Geopark looks like on the ground

After viewing presentations and meeting staff at EGN conferences, I visited Katla Geopark first hand in April 2014. The visit itinerary was devised by Katla Geopark staff as a five day pilot 'educational tour' to introduce the territory. Their interest was to consider the potential for this form of study trip as a possible tourism package and source of revenue for the geopark. I was again satisfied to allow the geopark staff to guide me around the features they wished to introduce and promote. Through being accompanied by geopark staff, I also had the opportunity to be introduced directly with a number of other stakeholders and residents.

With a thinly distributed population and limited built up areas, the physical relief in the South of Iceland strongly influences where infrastructure can be more easily placed and access can be gained. The coastal fringe in this section of the country is dominated by a unique and complex system of rapidly moving ephemeral rivers, streams, sands and gravels. As a consequence the sparse population is concentrated in a narrow belt of fertile land just below the volcanic highland and ice-capped terrain of the interior. In essence the N1 ringroad is the only way in,

around and out of the geopark area and joins the main settlements and attractions. As with the three towns in Torbay that play a prominent role in the layout of the English Riviera Geopark, there is a strategy to ensure that the municipalities involved in the Katla Geopark partnership each ensure their respective administrative centres have a presence and provide a visible expression of the geopark. Hvolsvöllur the main village of Rangárfling eystra municipality, Vík the centre for Mýrdalshreppur, and Kirkjubæjarklaustur the focus for Skaftárhreppur municipality are the three gateway locations for the geopark. Within or near to those villages, three of the four gateway centres are located.

Figure 16 - Rugged coastal scenery near Vík in Katla Geopark (Jonathan Karkut, April 2014)

6.4.4 - Museums and cultural centres

Travelling in from Reykjavik or the international airport, the most westerly and thus first reached of these centres, is the Saga centre in Hvolsvöllur. This attraction was initially designed to introduce and bring alive the Njála Saga which was

historically set in the distinctive farms and landscapes around Hvolsvöllur. Curation and guiding of the exhibits is conducted by the motivating force behind this site and local resident, Sigurður Hróðmarson. The saga of Njal has a ubiquitous presence in the Icelandic education system, being present on the national curriculum and familiar to Icelanders across the generations (Katla interview, 2014a). However, the centre sought to expand and contextualize that familiarity, presenting the saga in new forms to a wider international audience, by creating an artwork that has a significant meaning for the community and will also contribute to tourism in Rangárþing eystra. Therefore inside the museum another building houses Njálurefill a new activity were the goal is to sew Njáls saga in tapestry with Icelandic wool yarn, using refilsaum, a particular type of stitch that was used in the Viking age (Katla interview, 2014a).

The organization of this endeavour was guided in particular by Kristín Ragna Gunnarsdóttir, an artist and literary scholar, who designed the pictures printed on the tapestry for sewing into place. She came together with other individual members of the local association to attend and work on the artwork. Then when a visitor arrives, for a small fee (currently 7 Euros) they are introduced to the technique and allowed to sew stiches into the tapestry themselves, then write their name and what part of the tapestry they sewed in a guestbook that is on display in the same area of the Saga Centre as the tapestry itself. Visitors (both residents or tourists) can stay for as long as they wish, to chat and interact with others working at the tables where segments of the saga are laid out (Katla interview, 2014a).

Moving along the ring road in an easterly direction, about an hour's drive beyond Hvolsvöllur, the second of the core visitor centres is reached. The Skogar museum (Skógasafn) is another of the founding institutions of Katla Geopark. The museum is the life work of what the geopark staff describe as 'living heritage legend', Þórður Tómasson, who founded and directed the Skógar Museum, since its inception in 1949 (Katla interview, 2014a). Þórður had until the summer of 2014 worked every day in the museum, personally demonstrating and bringing alive the exhibits, spinning wool, playing the church organ or the Langspil and relating to the visitors how life used to be in Icleand. By the time of my visit, Þórður was 93 years of age and had finally begun to step back from his daily role in the museum. Skógar Museum is open every day of the year and has more visitors (in 2013 it welcomed around 45,000 people), than any other museum in Iceland, outside of Reykjavík, the capital of Iceland. As with the Saga centre, an extension from the original exhibition has taken place, with sufficient items collected to justify the addition in a nearby building of a local Museum of Transportation.

Figure 17 - Þórður Tómasson, founder of the Skógar Museum, guiding and demonstrating function of museum objects (Jonathan Karkut, April 2014)

Continuing in an easterly direction along the ring road, the next substantial locality is the administrative centre of Mýrdalshreppur municipality, Vik. The village lies on the rugged coastline at the southernmost tip of Iceland near the foot of the icesheet Myrdalsjökull – which sits atop the active volcano Katla, after which the

geopark was named. As a consequence of this setting, Vik is an emerging hub for adventure and nature tourism related services. Agriculture also remains important to the region, with the raising of horses and sheep being the main activity. As well as being a source of meat, the wool from Icelandic sheep has been used for knitting sweaters with traditional patterns, called lopapeysa. Vik has long been a hub for this form of knitting and now hosts a substantial factory and retail outlet on the edge of the village. Lopapeysa from Vik have consequently been displayed in all of the information centres for Katla Geopark and are used as one of the expressions linking the landscape and human activity in the territory (Katla interview, 2014b). The focal point for the geopark in Vik is the museum and tourist information centre, the Kötlusetur.

Beyond Vik, lies a broad expanse of meandering glacial outwash rivers and black volcanic sands named Myrdalssandur. Due to its dynamic and shifting nature, this was one of the final sections of the ring road around Iceland to be completed. Before the road was built, this treacherous plain could only be navigated on horseback with the assistance of local farmers that were familiar with the moving terrain. The changing and mysterious nature of the landscape consequently became the subject of local folk tales and myths. Once through that unique terrain, I was driven to another distinctive landmark, the vast swathe of flood basalt lava, produced by a combination of fissure eruptions from Eldgjá in 938 AD and Laki in 1783. After a further two hours travel, I finally arrived at Kirkjubæjarklaustur, the main village of the third municipality in the trinity that jointly host the geopark, Skaftárhreppur. The smallest in terms of population, Kirkjubæjarklaustur is the location for the fourth and most easterly centre of the geopark, an exhibition and

study centre called Kirkjubæjarstofa. Being the closest village to the Laki eruption site which is located in a remote uninhabited expanse of lava fields and other volcanic features, Kirkjubæjarklaustur acts as the gateway for information and the starting point for many tours to the Laki fissure.

6.4.5 - Geosites

As with each individual geopark, lying in the middle of strategy and rationale behind the project are specific sites which are the focus of geological conservation and educational efforts. As introduced in the previous chapter, in the context of the geoparks model the definition of such 'geosites' has been expanded beyond a locality of solely geological interest, to include additional environmental and cultural components.

In the territory of Katla Geopark, 81 of these geosites were identified at the inception of the project. They cover many parts of the near 10,000km^2 but with access and safety being a priority nearly half of the geosites are located within a few kilometers of N1 ring road. Two thirds of these sites are protected under either local, national or international legal frameworks. Seven sites are also listed as being of international scientific value – these are;

- the two ice-capped volcanoes Katla and Eyjafjallajökull
- the volcanic fissure eruption sites of Eldgjá and Lakagígar
- their two related lava field formations
- and the linear hills produced by subglacial fissure eruptions, geologically known as hyaloclastite ridges

During my field visits to Katla Geopark we stopped and were shown around a dozen geosites, whilst en-route further sites were also pointed out from the vehicle or roadside. The majority of the geological and natural geosites relate to volcanic, glacial, fluvial and coastal features or processes. These include substantial waterfalls, volcanic cones and mountains, lava fields, sea arches, cliffs and other features dominant in the local landscapes. In respect to the cultural sites, they are concentrated around elements of farming and other village settlements, thematic trails or routes often linked to agricultural practices, and residencies of significant local figures such as Jon Steingrimsson – the priest whose leadership and faith held the community together during the catastrophic Laki fissure eruption of 1783-1784.

In terms of accessibility and visibility, a number of geosites are identified in close proximity to the four museum and visitor centres, and these are easily reached independently. A few additional sites are also quite accessible by road and can be visited by self-guiding using tourist maps or information leaflets. The majority of remaining geosites lie away from the ring road, either on the coast, or in the highland interior. This grouping are all challenging to reach and most suitably visited in the company of a specialist guide. Within this last grouping, six of the seven geosites listed as being of international scientific value are located.

Through the EU Instruments of Pre-Accession (IPA) project, twenty five geosites were to receive interpretation panels and signs relating to the local geology, history and in some cases safety information for tourists and other visitors from

outside of the region (Katla interview, 2014b). These were constructed primarily to support the tourist infrastructure and help develop trails and facilitate further access. However, the cessation of membership talks in 2013 between Iceland and EU, curtailed much of this infrastructure development. Finding an appropriate and sustainable approach to bringing accessibility, especially to the more dramatic landscapes and geosites that sit in the interior of the geopark, is one of the most prominent issues that Katla Geopark is presently seeking to address.

6.4.6 - Overall layout of the geopark

The sites visited in person and the landscapes I observed and described above, demonstrate that the geopark provides an even distribution of development across the three municipalities of Skaftárhreppur, Mýrdalshreppur and Rangárþing eystra, over whose territory the geopark is bounded. But, the spread and focus of attractions also reflects the reach of infrastructure and concentration of settlements in this rugged and often remote land. Consequently the visible sections of the geopark essentially lie in a linear, ribbon like corridor that coincides with the one principle road in the region, the N1 ring road.

At the entry points on the ring road coming into Katla in the West and in the East, road signs pointing out the boundary of the geopark are present. Beyond those road signs, visibility in the sense of the type of maps, signage, boundaries and other features that a protected area such as a national park would place in prominent locations, were limited. The linear alignment of the most visited features in the geopark, is one of the reasons that the destinations in the south of Iceland still struggle to retain or slow down the transit of visitors as they drive

through. Part of the geopark policy more recently therefore builds around how sites that are currently less accessible, particularly in the highland areas of the geopark, can be somehow included and sustainably developed (Katla interview, 2016a). This would assist on a number of levels, not least in bringing to the fore those geosites that are recognized on an international level, and are amongst the most dramatic in the geopark. In turn accessing such locations opens up the possibility of creating circuit or loop itineraries that might be incorporated for tourism and education purposes, and help deliver the overarching target of generating new jobs and opportunities and retaining skilled graduates from the region (NOHNIK architecture and landscapes, 2016).

Although the three partner municipalities in Katla Geopark are able to identify their own developmental challenges and formulate local policies,

'The Icelandic governmental structure has only two official administration levels, the national (state) level and the local (municipal) level and the term "region" does not represent an official administrative level. Therefore, policy making for innovation and economic development is dominated by the national level'. (Lindqvist et al., 2013)

The clearest example of this came in the form of the opening up of substantial funding from EU IPA sources for Katla Geopark in 2011, only for that opportunity to be terminated in 2013 with the shift in position regarding membership of the EU. The whole cycle of events being shaped by national government and its foreign policy, and out of the control of the geopark partnership.

It is pertinent therefore for this case study to identify and consider the policy areas that are outlined as being of importance by the geopark partnership for Katla Geopark and the southern region of Iceland to address. As has already been observed in the influential case of Icelandic EU membership and IPA funding, policy is a fluid and mobile process (Law and Singleton, 2014). There is a useful opportunity therefore to examine more closely how Katla Geopark interprets, adjusts and interacts with the various policy directions that operate around its territory. As with the other geopark case studies, there is the question of interaction with policy derived from governmental structures, and in addition the influence and processes around the policies as presented in the EGN/GGN charter.

6.5 - Policy in the region around Katla Geopark

At the time that Katla Geopark was first conceived and emerged into the European Geoparks Network (between 2008-2011), policy in Iceland was strongly guided by the drive towards recovery from the 2008 economic crisis by means of developing around what was termed smart and sustainable growth (Lindqvist et al., 2013; Prime Minister's Office, 2010). Two documents in particular have been indicated as influencing the direction taken at that time by Katla Geopark (Katla interview, 2015b).

a) The initiative of the Icelandic Centre left and Green alliance government of the time, called 'moving Iceland forward 2020' (Prime Minister's Office, 2010).

b) And the policy statement titled 'Iceland 2020 – governmental policy statement for the economy and community' (Prime Minister's Office, 2011).

These policies both called for a more integrated approach to development, which had a strong focus on generating plans for the Icelandic regions, grouping together aspects regarding employment, education and public services. Each approach also identified tourism as a core growth area. Consequently Katla Geopark was recognized as an important project for the Suðurlands or South of Iceland region, as its policy strategy aligned with the Moving Iceland Forward 2020 national plan (Katla Geopark Project, 2010).

6.5.1 - Local agricultural policy and setting

Farming has long been the main economic activity in the Katla Geopark area with the villages of Hvolsvöllur, Vík and Kirkjubæjarklaustur acting as service centres to the local farms and their produce. Traditional dairy and sheep farming have been predominantly based on the cultivation of grass for hay production and out of all the regions in Iceland, the 770 farms located in the Suðurlands as registered in 2010, represents the highest number in the country (Statistics Iceland, 2017). However, the overall proportion of income that agriculture brings to the Icelandic economy, has been gradually diminishing over the past decades (Thorhallsson and Rebhan, 2011). The most significant pressure impacting on the local agricultural sector as viewed by staff in the geopark (who commonly still have family or relatives who are farmers) has been the change in demographics. The population of the three local municipalities is declining in number and growing in age[4], with

[4] Population in the Geopark area has decreased by 2.6% over the past ten years, compared with a 13.8% increase for Iceland as a whole, and 11.6% for the South Iceland region. There is also

the youth of the region increasingly reluctant to take over the same agricultural work as previously practiced by their families. This backdrop has played a significant role in shaping one of the overarching objectives of the geopark project which is to assist in generating jobs (of an unspecified nature) for locals, particularly those with academic degrees in order to encourage them to move back to their home areas after studies that are usually undertaken in educational institutions outside of the Suðurland region.

Faced with these demanding circumstances, geopark staff explained that an increasing number of farms have begun to diversify their businesses and supplement their income by connecting to a variety of activities linked with the leisure and tourism sector. These adaptations have come in a variety of forms. Many have taken the relatively direct step of renting out rooms, outhouses or other farm buildings. This type of farm tourism has ranged from the provision of spaces for ad hoc rental to more hands on hosting or providing of a farm experience holiday (for instance see: https://www.heyiceland.is/tours/farm-holiday?travelstyle=4). Within this latter approach, one of the most popular moves has been to utilize horses which traditionally were either engaged for labouring tasks around the farm or in some circumstances raised for their meat, to be used instead for horse riding and trekking (Katla interview, 2014a). This reuse of the livestock has become highly successful and as well as the use of specialized

considerable variation within the Katla Geopark Project area: Rangárþing eystra has seen a growth of population of 4.7% over the last decade and Mýrdalshreppur 2.0%, but at the same time Skaftárhreppur suffered a decrease of 23.9%. The average age of the population of the area is around 39 years, slightly higher than that of the rest of the country, which is around 36 years. Again there is some variation between municipalities as Rangárþing eystra has an average age of 37.5 years, Mýrdalshreppur 39 years and Skaftárhreppur 44 years.

websites and companies, simple road side signs outside of the property indicating 'horse rental' are a common sight across Katla Geopark. The success has also generated additional jobs, for instance one farm that I visited in the west of the geopark, hired and used a number of staff seasonally. Such staff were recruited on the basis that they could provide further work skills including language and guiding skills as well as the obligatory equestrian experience (Katla interview, 2014a).

Another range of connections have come about through the presentation of Icelandic sheep farming as an aspect of their local cultural heritage. The isolation of the sheep breed in Iceland and its specific nurturing, the particular form of free range grazing in ice capped mountain pastures and the practice of collectively gathering up and re-dividing the stock to their individual farms in autumn, has given rise to an active promotion of this form of farming (see: http://www.icelandlamb.is/resources/files/buyers_guide.pdf). Particularly the autumn roundup known in Icelandic as the *réttir*, has become an opportunity to expand what used to be a task shared just amongst family, friends and villagers, into a rural festival and celebration that draws in increasing numbers of visitors and tourists to the sheep folds and towns. With the largest number of sheep farms in Iceland lying in the region around Katla Geopark, the réttir celebrations are evolving to become significant events that introduce further associated music, dance, handicrafts and other products produced in the area (Katla interview, 2014b).

The relationship between the volcanic landscape and agricultural livelihoods has been a dynamic one right from the moment of the Viking settlement of the country at the end of the first millennium AD. Saga tales of farms being swept away and a population having to be acutely aware of where their homesteads were positioned, was brought into the 21st century with the impact from the 2010 eruption of Eyjafjallajökull. The recently constructed visitor centre at Þorvaldseyri farm, is one of the newest and more accessible additions to the geopark, presenting both a personal and a scientific introduction of that eruption. On visiting the centre in 2014, I had the opportunity to interview the manager to hear how their idea emerged and how it opened up considerations regarding the fluid and adaptable nature of policy when viewed in practice.

In the early stages of the geopark project, Þorvaldseyri farm had little to do with the programme of activities. Ólafur Eggertsson, who ran a successful agricultural business based initially around dairy cattle and later expanding to include the cultivation of barley and rapeseed - both very unusual and innovative crops for this far Northern corner of Europe. But that was to change dramatically in the spring of 2010. The farm happened to be one of the closest settlements to the previously little known volcano, Eyjafjallajökull. One dramatic image of the ash cloud looming over Þorvaldseyri farm taken at the height of the eruption by Ólafur Eggertsson in April 2010, captured substantial media attention. Consequently the farm became one of the epicenters helping to convey the human story linked to the eruption. A place where the abstract tale of tiny volcanic particles bringing the whole of the civil aviation industry in Western Europe to a halt, could be immediately and tangibly understood as buildings, crops and livestock at the farm

were covered in a thick blanket of fine grey ash and everyday routines came to a standstill.

Figure 18 - Guðný Valberg speaking to visitors at Eyjafjallajökull Visitor Centre adjacent to her farm in Katla Geopark (Jonathan Karkut, April 2014)

The cleanup operations during and following the volcanic eruption were challenging enough, but as Ólafur's wife Guðný Valberg explained to me, the farm also faced new tasks in coping with the arrival of unfamiliar groups of curious visitors. These uninvited 'guests' came both from the media building the back story to aviation chaos in Europe and a growing number of 'volcano tourists' wanting to experience the eruption as closely as safely possible. From a set of circumstances that was initially out of their control, Ólafur and Guðný's early response was to seek to control the disrupting situation around their farm and at least steer the new 'guests' away from the entrance to their property. They owned a derelict building across the road from the entrance, and started to receive visitors there in

order to explain how the eruption had impacted their lives and livelihood. The cessation of the volcanic eruption didn't halt the flow of arrivals, so the couple decided to move from a position of not much more than 'crowd control', to the establishing of a visitor centre connected to the volcano and the 2010 eruption in particular. Seizing an opportunity out of a moment of crisis, the visitor centre has grown to such an extent that the family now has to divide its labour, with Ólafur concentrating on the familiar agricultural tasks, whilst Guðný has taken the central role in running an increasingly successful tourism business.

The centre has become the stage for a small cinema where a short documentary film made at the time of the eruption chronicles the experiences of Ólafur and Guðný's family during 2010. Beyond this there is a display explaining some of the science behind the eruption and the linkage with other Icelandic volcanoes. A further corner of the centre has become a shop with souvenirs as well as produce from the farm such as dried barley. Guðný explained further that the circumstances whereby the farm had additionally become a tourism attraction almost by default, were not necessary embraced with open arms. Her positioning outlined that stakeholders could equally be ambivalent about the new developments in tourism across their locality, as well as be willing recipients in some cases or unwilling in others. In addition to being placed in a new situation running a tourism business, Guðný explained how this shift had also brought her more directly in contact with the geopark project and its staff. That movement ensured that she was now more actively seeking to understand the geopark strategy and make new collaborative links that had not been seen as necessary prior to the 2010 eruption (Katla interview, 2014a).

6.5.2 - Tourism policy

In contrast to the mature tourism setting viewed through the previous case study of the English Riviera Geopark, the backdrop for the sector in Iceland and more specifically around Katla Geopark, has only recently emerged as a significant factor in contributing to the shape of the local economy and society. The economic dominance of exports around fishing, heavy industry (in particular aluminum processing) and agricultural products, ensured that although tourism had grown steadily during the last two decades (PKF, 2013), it continued to struggle to be considered by politicians, policy makers and local citizens as being a 'real' industry or profession (Jóhannesson and Huijbens, 2010). As long as those principle sectors maintained stability, there was a general absence of concern or engagement to fulfill the potential of tourism across Iceland. Whereas research and policy debate flourished for instance around the long term viability of the fishing industry, as coordinated by the Marine Research Institute, no such context was generated in relation to Icelandic tourism (Jóhannesson, 2016).

The economy in Iceland was however, to experience a seismic shock, as the country became one of the most prominent early victims of the 2008 financial crisis. The banking sector was most dramatically impacted, with nearly 85% of the sector collapsing within a period of just under a month, and Icelandic króna devalued by 100% (Matthiasson, 2008). At this juncture with inflation and unemployment rising alarmingly, tourism was placed centre stage by the national authorities as a prominent component to help resolve the significant economic challenges (Jóhannesson, 2016). Ironically one of the supporting factors towards

tourism growth was the substantial realignment of the national currency. The overnight change in exchange rates meant that for many visitors, both the airfares and the cost of living in Iceland became affordable for the first time (Jóhannesson and Huijbens, 2010). The upward trajectory of arrivals was enhanced further with the arrival in 2012 of Easyjet flights to Keflavik international airport, as the first foreign low-cost carrier. Additional competition was then added through the creation by local entrepreneur Skúli Mogensen, of a new budget airline called Wow Air (Sheivachman, 2016).

6.5.3 - Tourism initiatives in Katla Geopark

In the midst of this realignment, the Katla Geopark entered into the European Geoparks Network. During the period of its emergence there was no overarching tourism policy direction either at the national or local levels, although the sector was mentioned in the general government strategy documents. Instead with an absence thus far of a management plan agreed by all partner institutions in the geopark and considering the roles, functions and activities of each partner institution, the organization of tourism development in the geopark territory mirrored that across the country in general. Although broad tourist arrival figures showed a rapid upward trend, organization involved an array of different institutions and businesses, set within differing political, geographical and legal boundaries (Katla interview, 2014b). Equally, the experiences and opinions expressed by enterprises such as the visitor centre managed by Guðný Valberg, indicate how even if there were a more singular or coherent tourism policy, that policy 'is practiced in materially heterogeneous ways' (Law and Singleton, 2014).

So, for example in Kirkjubæjarklaustur the building which used to house the slaughterhouse, has been developed into a tourist attraction with a focus on information relating to local culture, events and activities. Whilst in Vík a knitwear production enterprise forms one of the biggest workplaces and has also been turned into a tourist stop off and local souvenir shop. Another enterprise, Vík Prjónsdóttir, is a cooperation of young designers inspired by myth and local culture in the area, and it too is having success in the export of their wool designs. Hvolsvöllur on the other side of the geopark, still retains one of the biggest meat processing plants in the country and has developed original branding as part of the promotion of local food production. Hotels and guesthouses have also developed rapidly in recent years, both in the three villages and on individual farms and homes.

The Geopark's website www.katlageopark.is has a strong destination focus, and provides a portal to access a range of accommodation and activities, including golf, horse riding, angling, hiking, and glacier walking. The Geopark is also seen as an opportunity for *local handcrafts*, with some small companies already producing knitwear. There is a long tradition of handcraft production in Icelandic homes. Therefore quite a few individuals design and produce their own products to sell in various farmers markets or in local hotels in the area.

At the same time, the opinion given by a number of geopark stakeholders, was that the increased load of tourist arrivals was not met with matching support for improved infrastructure or assistance to help with a perceived increased "burden on local resources" (Katla interview, 2015b). During the period following the 2008

crisis, tourism continued to be compared to the other mainstays of the Icelandic economy, which created an emphasis on generating increasing numbers of visitors above all other factors. Unlike in the fishing industry where the research and rationale behind sustainable stock and quotas was discussed and accepted by all parties, the tourism sector was seen to be bereft of background data, information and a nuanced understanding as to how the sector should be organized (Jóhannesson, 2016). Even though tourism had by now been acknowledged as the 'third pillar' of the economy, there remained a lack of governmental guidance in terms of overall strategy and policy needed to sustainably shape the sector (Jóhannesson, 2016).

6.6 - Partnerships, alliances and operating in an active network

As Katla was the only geopark in Iceland during its first evaluation cycle, and then a central strand of its funding in the form of IPA support curtailed with the cessation in 2013 of governmental negotiations to join the EU, it increasingly looked for both collaborative exchanges and budgetary support through a range of different project links. These have ensured that it has played an active role in fulfilling its commitment to article 6 of the EGN charter,

'A European Geopark must work within the European Geopark Network to further the network's construction and cohesion. It must work with local enterprises to promote and support the creation of new by-products linked with the geological heritage in a spirit of complementarity with the other European Geoparks Network members'. (EGN, 2011)

Katla Geopark's interpretation of this EGN article is in part guided by its limited staff resources, and administrative capacity to organize project management directly. As a consequence it has principally entered into collaborations as a co-partner of a consortium rather than the lead coordinating agency (Katla interview, 2015b). Inside the Katla Geopark partnership, the University Centre of South Iceland (Háskólafélag Suðurlands) has in turn taken prime responsibility on behalf of the geopark to channel project activities. This is due to a number of factors, which include the breadth of programme opportunities that a university centre can be eligible for, and the relevance of research, education and developmental activities that university staff can contribute towards which are also policy priorities and objectives for the geopark itself.

To optimize the visibility of Katla Geopark and place itself in a position to be recognized as a potential project partner, a representative from Háskólafélag Suðurlands has generally been present as one of the two colleagues that are obliged to attend the biannual EGN meetings. Invitations to enter into future project consortia also follow a range of different criteria. Geopolitical connections ensure that Iceland is most immediately connected and eligible to regional partners through structures such as the Nordic Council of Ministers. For example the Nordic Atlantic Cooperation (NORA) is an intergovernmental organization that brings together the Faroe Islands, Greenland, Iceland and Coastal Norway (NORA, 2016). Consequently Magma geopark in Southern Norway responded by devising the NORA funded 'Northern Georoutes Project', which included an international consortium of northern geoparks and private companies including Katla Geopark,

to combine resources and experience for the transnational organisation and marketing of geotourism across four countries (Magma Geopark, 2013).

Project partnerships are not always limited to the existing network of geoparks. Often they are an opportunity for new or aspiring geopark territories to gain support and generate knowledge both about geopark formation and about issues or themes that are policy areas covered by the geoparks charter. Additionally projects can bring together other partner organisations that do not even aspire to become a geopark, but have an interest in topics such as geotourism. The inclusion in the GEOmuseum project of Ilulissat Icefjord World Heritage Site in Greenland is an example of this situation (Magma Geopark, 2016). Even though Iceland has stepped away from full membership, it still remains eligible to a number of other European Union funding programmes. Consequently Katla Geopark has accessed support and become a partner in projects funded through initiatives including the Northern Periphery and Arctic Programme (Causeway Coast and Glens Heritage Trust, 2016) and ERASMUS+ (Háskólafélag Suðurlands, 2016a). These projects have allowed Katla Geopark to build linkages far beyond the Nordic region, and include partner organisations in Canada, Russia, Poland, Croatia and Portugal.

6.6.1 - Icelandic geoparks network emerging

Across the EGN-GGN new and emerging geopark projects are actively encouraged and beyond the type of collaborative projects such as those described above, a further starting point is often through exchanges and dissemination within national heritage, conservation and development pathways (Katla interview, 2015b). Such links work to ensure that on a national policy stage the geoparks

initiatives generate momentum, as well as building awareness and a consensus around the potential benefits from applying the geoparks model.

Being the first geopark in Iceland has brought Katla a mixture of pros and cons. On the one hand it has been able to promote itself as an innovative and new structure locally. But at the same time being first has meant that a considerable amount of effort has to be put into explain what geoparks are and what they might offer to different public and private organisations or businesses. That type of effort can be shared if there are additional geopark projects across the country (Katla interview, 2015b). In no small measure due to the size of the Icelandic population, awareness of geoparks circulated quite rapidly as Katla Geopark representatives attended conferences, trade fairs and other local events, and spoke about the model through traditional media channels as well as via social media (Katla Geopark, 2016).

One other factor that aided the spread of geopark initiatives across Iceland, was to the detriment of Katla Geopark itself. Throughout its early years, the struggle to secure ongoing and sustainable funding, has contributed to Katla facing a challenge in retaining personnel and forming a sense of project continuity. When job prospects arose in other towns, Katla Geopark could not compete with those opportunities and faced the form of outward migration that ironically was a key feature behind the creation of the geopark in the first place (Katla interview, 2015b). Those losses for Katla were to the benefit in particular for the development of a second geopark project in the western end of the Reykjanes peninsular where Keflavik airport the principle international arrival point for Iceland is located. Two of the key staff behind the original Katla Geopark

application had moved to jobs in the Reykjanes area. With them they brought insights and information as to how the Reykjanes geopark might successfully draw from lessons previously learnt and importantly look at a sustainable management structure and plan. After one deferral from the EGN, Reykjanes geopark was accepted in September 2015 and became the second global geopark to be located in Iceland.

The expansion of the concept in Iceland continued beyond Reykjanes, as other districts, particularly those away from the major touristic sites, expressed interest in applying the geopark model in their localities. A cluster of Icelandic geopark projects have now moved to create a national geoparks forum and share resources to further promote and lobby for awareness and additional input into national policy themes covered within the geoparks remit. Following initial preparatory meetings, the first formal meeting of the forum took place in August 2015. At this point it was agreed that the forum would be led by a geologist from the Icelandic Institute of Natural History, alongside the coordinators of the two existing Icelandic global geoparks (Katla interview, 2015b). Closer contact was also established with the Icelandic UNESCO commission, to ensure a clearer understanding and flow of information occurs between the individual geoparks and appropriate governmental structures relating to culture, science and education. The familiarity and exchanges between the different geopark projects in Iceland are subsequently providing a solid platform from which to evolve a more coherent national perspective and strategy towards engaging with the geoparks model and enhancing their role and recognition in Iceland (Katla interview, 2016a).

In the short period that geoparks have been active in Iceland, they have experienced a dramatic sweep of events, challenges and opportunities. From the economic collapse and devaluing of the Icelandic króna, to the eruption of Eyjafjallajökull and the on-off negotiations to join the European Union, the management and sustaining of the model locally has had to face up to a rapidly moving policy setting. Most recent amongst the challenges however, has been one that is internal to the EGN, as the revalidation mission in 2015 presented Katla Geopark with a yellow card in its evaluation.

6.6.2 - Policy revalidation and yellow card from UNESCO

One consequence of ensuring that each geopark attends regular network meetings as well as participating in additional project alliances, is that the process of revalidation is never far from the thoughts of individual geopark staff who participate in those meetings and events. The test is often in motivating the wider geopark consortia or other political structures that are needed to commit and be as active as the coordination team (Katla interview, 2015a). With the process involving Katla Geopark, circumstances including the turnaround of staff members, the decommissioning of one of the partner organisations, the collapse of a crucial funding stream, plus the continuing absence of an operational management plan endorsed by all of the consortium, ensured that more than nervous energy was present in the lead up to their first revalidation in the summer of 2015. For over a year in the lead up to the visit of the evaluators, there was a growing concern that Katla would face problems particularly around the application of a sustainable management plan. But as indicated in the previous chapter regarding the

revalidation process at the English Riviera Geopark, concerns about passing all sections of the evaluation were used to push through a momentum that brought commitment to the project objectives, which could be absent when expressed during more day to day meetings or exchange of communications. The urgency built around the prospect of losing the hard won status of European and Global geopark, became a positive driving force (Katla interview, 2016a).

In the case of Katla Geopark, the self-evaluation forms also made it clear where changes had to occur in order to re-secure their EGN membership (Katla interview, 2015a). When the mission finally arrived in August 2015, it then came as no surprise where the short comings lay in the organisation and activities of the geopark; there was no clear role played by each of the three partner municipalities; an absence of core or sustainable funding channels; limited range of soft and hard infrastructure, beyond the N1 ring road artery; and the ongoing lack of a cohesive management plan (Katla interview, 2016a).

Rather than be daunted with the prospect of resolving these particular shortcomings however, there was sufficient positive feedback on other components of Katla Geopark. For instance grassroots engagement with local businesses and associations and the effective connection with educational institutions from primary to tertiary levels in the south of Iceland and strong networking with other geoparks, placed the geopark in a position where it could mature and build the credibility and trust needed allow it to work effectively with the local municipalities. In turn those relationships would support new approaches to central government which were required in order to secure core funding and a

long-term strategic direction (Katla interview, 2016a). One major change however, added further leverage to the case for Katla Geopark, and that was the acceptance in Autumn 2015 for geoparks to be incorporated as a formal programme within UNESCO. The protection of a now privileged status of UNESCO global geopark for Katla was something that motivated governmental agencies to cooperate much more closely than before, or as one member of the Katla Geopark staff expressed it, 'the demands of UNESCO act as a catalyst and pressure to do better' (Katla interview, 2015b).

The changes in policy direction particularly relating to tourism development at a national level have also come at a suitable moment for Katla Geopark. For instance the new emphasis on Destination Management Plans (DMPs) is being backed by central funding. The move towards simplification and coordination across differing government agencies, has also helped progress discussions to find a solution to provide improved infrastructure for the more remote rural areas. Additionally new laws are being applied to support funding of infrastructure for the protection of the natural environment (Katla interview, 2016b). These steps compliment the moves made by the geopark to provide a sustainable approach in making many more of its geosites accessible, interpreted and incorporated on the destination tourist maps and circuits (NOHNIK architecture and landscapes, 2016).

Most fundamentally however, the new commitment to retaining Katla's UNESCO global geopark status has opened up new channels of communication through the association of municipalities directly to the Icelandic Prime Ministers Office. Consequently on 16th October 2016, prime minister Sigurður Ingi Jóhannsson

signed a commitment to provide direct funding over the next five years to allow for the provision of two full-time staff for the geopark (Háskólafélag Suðurlands, 2016b). Although this demonstrates that the yellow card warning has generated a new stimulus, the list of policy turns and changes equally highlights that the pathway to creating a stable and sustainable vision for Katla Geopark is a complex and fraught process.

6.7 - Conclusions

The spectacular sweeping volcanic landscapes of Katla Geopark alongside its tiny human population and physical imprint, provide an opportunity to look at a quite different frame on which to interpret the geoparks model. The objectives of the chapter were to look inside the decisions made during the rapid period the Katla Geopark project was initially conceived, to then consider the impacts of policy decisions and strategies that were made principally by central government in Iceland and quite apart from the immediate priorities of the geopark, then finally to evaluate the consequences of this geopark falling short of the demanding revalidation process. Would that move be its death toll in a sequence of fluctuating fortunes?

The backdrop to this second geopark case study in the south of Iceland provides a dramatic physical contrast to the example of the English Riviera Geopark. Again following the direction of the local geopark coordination team, it was apparent that the physical landscapes that dominate Katla Geopark tangibly shape its presence and where or how its development can take place. Mirroring the rapid and

tempestuous changes that follow the volcanic eruptions that periodically dominate life around Katla, the emergence of the geopark was quicker than even its most ardent supporters could have anticipated(Katla interview, 2015b)From the initial seed of an idea to membership in the EGN-GGN took a little over three years. With limited resources, the coordination team could easily present the geological argument to establish a new geopark in the south of Iceland. The speed of delivery however, did not allow for a bespoke representation of the most appropriate structure or form of management to take place. Instead Katla Geopark was guided by finding an alignment alongside more general policy statements and directions (Prime Minister's Office, 2011) that were motivated to provide recovery from the dramatic impacts of the 2008 financial crash.

Internally the loose management structure in Katla has meant it has had to take an opportunistic approach to funding and development. Initially one opportunity emerged with the opening of government talks for Iceland to join the European Union. But having first secured support through EU IPA budgets, the geopark was exposed to a subsequent change in policy by a new government coalition. This in turn pushed another reactive step, which led to the engagement by Katla's partnership in a series of externally funded Nordic council and EU programmes. These built up effective and reliable linkages with other existing and aspiring geoparks across a wide sweep of territories (Katla Geopark, 2016; Magma Geopark, 2013). Throughout this initial membership period in the EGN of four years, these fluctuations provided a background where it was difficult to retain staff, as long term funding and stability were uncertain (Katla interview, 2014b).

Chapter 7 - Case study of Marble Arch Caves Geopark, NORTHERN IRELAND AND REPUBLIC OF IRELAND

Up on the boardwalk

March 2017

After a brief negotiation its agreed. My eagerness to see the new highlight of this corner of the geopark is easily accommodated. Like all of my requests in previous visits, my hosts in Marble Arch Caves geopark are always happy to take me out and about to see any one of the numerous geosite attractions in Cavan or Fermanagh. You don't notice the border. This time its Brendan who is my guide. He's normally taking visitors around the caves themselves, but because we haven't yet reached the official tourist season when the show caves open, there is an opportunity to take me away from the Marble Arch Caves visitor hub and in the geoparks very own 4x4 truck to the new boardwalk path leading up to top of Cuilcagh mountain. More than comfortable handling this type of vehicle, Brendan like many amongst the geopark staff comes from a farming background. His family have been raising sheep and cattle in this corner of Fermanagh for generations. He still helps out at busy times like lambing season, but that's family commitments. This is his job now looking after tourists, and every now and then inquisitive anthropologists.

It's just a short drive out to the place where the other visitors today have to leave their cars and head out on foot. But equipped with the padlock keys I jump out to unlock the first in a series of gates as the gravel road winds its way up and out across the boggy and windswept scene. We have a briefer schedule and so take the slow drive up the few kilometres of gravel road. Already there are several cars parked and

the first group I spot are six walkers who are kitted out in full hiking outfits and look like they know what they are up against. Its early March and although mild down here, up on the top of Cuilcagh there is still a dusting of snow and the speed with which the clouds are scooting past shows that the weather can change rapidly. The flat-topped profile of the mountain is quite distinct. Just like Ingleborough Hill in the Yorkshire Dales, I say to myself. Another hotspot for hikers and geology field trips alike. My thoughts immediately shift to thinking, I really can't believe that the mountain marks the border. During the Troubles there would certainly not have been any casual hikers or walkers up here. The hard infrastructure of surveillance is replaced by the conservation infrastructure of a boardwalk to protect this wetland bog of international significance from too many tramping boots.

Brendan is quick to point out that the success of the boardwalk really took them by surprise. "What's most remarkable is the range of people who now come up here". This comment is almost immediately borne out when having passed the group of six professional looking walkers, we come across a couple striding ahead in little more than a shellsuit and trainers with the bloke wearing a red Man United bobble hat. Brendan adds, "with the boardwalk we put up in 2014 numbers have just exploded. This is causing us problems, but it's great for numbers and getting people out and enjoying the environment that they wouldn't have before. But you're getting a lot of people who're not hill walkers using it. This is causing problems on the one hand, but they are seeing something completely different than what they would normally see". Brendan mentions to me that the opportunity to put up infrastructure pieces like the boardwalk was just an opportunity they couldn't miss. The funding was there, and the sites really do get used now. He adds that one of the challenges is to join things up

strategically. There are new users of this landscape and a lot of different voices to accommodate. "We want businesses to be working here too, employing and able to ride on the back of the growth at the show caves". As I hop out and open another gate and rumble over one more cattle grid, we're reminded that this is also farmland. Eventually the road runs out and we look back. Hills, lakes and woodlands roll out to the horizon. A geopark interpretation panel presents the names and features that are visible, whilst the new boardwalk adds a further element to a complex vista.

7.1 – Introduction

This chapter brings together the findings on the third case study of this research, with a more longitudinal examination of the Marble Arch Caves (MAC) Geopark, located in the upland countryside that straddles the borderlands between Northern Ireland and the Republic of Ireland. Established in 2001 as one of the initial cluster of a dozen or so European geoparks, Marble Arch Caves Geopark represents one of the most established members within the European Geoparks Network (EGN), and the first geopark to be accepted into the network from the United Kingdom. From its inception to today, MAC Geopark has undergone a number of transformations and changes to its layout, physical and political boundaries, partnerships, organisation and policy directions pursued. Its shifting interpretation and representation of the geoparks model therefore provide a useful setting to examine how the processes of maintaining and adapting a geopark look on the ground.

MAC Geopark was also the first site that I heard about when introduced to the geoparks concept during an academic conference (2008 Geotourism Fremantle, Australia), and the first that I viewed on the ground during fieldwork visits between 2009-2011. As with the two other case studies at English Riviera Geopark and Katla Geopark, information and data was collected through a range of methods. Participant observation and semi-structured interviews with geopark staff, local businesses and other visitors were made whilst visiting different locations around MAC Geopark, most recently in March 2017. Additionally I observed how the geopark was represented at European and global geoparks conferences, the Irish geoparks forum and at international tourism trade fairs and events. This data was added to and complemented further with online digital approaches including analysis of social media postings, plus conversations and exchanges through email and other digital platforms including Facebook messenger and What'sApp mobile communications device.

7.2 - Why Marble Arch Caves Geopark as a case study?

As witnessed across a range of geopark activities and events where I have observed directly or participated, as well as through promotional and academic literature concerning geoparks, the Marble Arch Caves Geopark has consistently maintained a high visibility to become one of the most cited examples showcasing how the geoparks network members should seek to present the geopark approach (Eder and Patzak, 2004; McKeever and Zouros, 2005; Farsani et al., 2014). I have also experienced during geopark conference events, how Marble Arch Caves Geopark has been further championed by senior figures within the coordination

and advisory committees of the European Geoparks Network. Hence part of my rationale to choose the location as one of the cases for this research was to follow that flow of agency in order to observe how and why MAC Geopark was positioned as one of the more ideal examples of how to implement the model (Mc Keever et al., 2006).

Having been present as one of the initial cohort of geoparks that came together when the European Geoparks network became a formalized structure in 2001 (Jones, 2008), MAC Geopark has since managed to sustain its presence in the network by subsequently navigating its way through four further revalidation processes. At the same time it has proved successful in sustaining its development and management through securing a sequence of both bi-lateral and multilateral grants and funding streams (Karari et al., 2013; Fermanagh District Council, 2008). The longevity of the geopark and its continuing achievement in gaining local, national and international support, are a further reason why it is useful for this research to take a closer look at Marble Arch caves in particular to consider how this geopark has interpreted the model over an extended period of time, and adapted its assemblage of actors to establish itself as an important feature in this formerly neglected corner of Ireland (Murtagh, 1998).

Whilst interviewing key geopark staff and utilizing other ethnographic tools, I have observed how the MAC Geopark management has adopted a flexible approach to its interpretation as to how the geopark partnership may be applied locally. This has allowed it to take advantage of a number of opportunities to expand in terms of territory and partnerships. These in turn have opened up further prospects for

the geopark being in a position to access significant funding, to raise its profile and status and to engage more dynamically with policy concerns of relevance regionally and across the geoparks networks.

Most prominent amongst the alterations in its course as a geopark has been the extension through its association with the Republic of Ireland's Cavan county council in 2008 to become the first trans-boundary international geopark territory. This change has allowed MAC Geopark to benefit more directly from a broad swathe of programmes and policy tied to the peace and reconciliation process in Northern Ireland and to access additional European Union funds linked to that process (Driscoll and McClelland 2010; Pollak, 2012). It is useful to use the MAC Geopark therefore as a case to consider how pursuing the use of landscape and geological boundaries, rather than solely administrative or political margins is being utilized by an emerging cluster of geoparks. In turn this situation allows the research to consider the challenges, obstacles and opportunities presented when applying the model in a trans-boundary setting.

7.3 - Aims of the chapter

a) Adaptive and strategic growth

Since its formal acceptance by the European Geoparks Network in 2001 as the smallest geopark at that time in a discrete grouping of 12 European Geoparks, the management team of Marble Arch Caves Geopark has overseen a number of significant changes in terms of its partnerships, boundaries, attractions and organization. These have seen it change from being a tightly bound show cave and

mountain park to incorporating an extensive array of geosites and becoming the first trans-boundary international geopark within a worldwide network that now numbers 119 members - as of 2016. One of the aims of the chapter is therefore to consider how the adaptive and strategic growth in the geopark has been achieved, and the manner in which opportunities for altering the shape and direction of MAC Geopark have emerged and been applied.

b) long term commitment from public agencies

In the entire period from the inception of the Marble Arch show cave in 1985, through its reshaping as a European and global geopark, and adaptations to combine with a range of additional agencies and organisations, there has been continuous financial and logistical support from Fermanagh district council. Since its designation as a global geopark in 2001, there has also been longstanding partnership, technical and logistical support from the Geological survey of Ireland (GSI) and the Geological survey of Northern Ireland (GSNI). A second objective of this case study chapter is consequently to examine the significance and impact of having such continuity of commitment to MAC Geopark, and how that connectivity is maintained.

c) Perspective of being both a local and a global geopark

One observation from ethnographic fieldwork onsite, as well as hearing and seeing presentations and other information regarding MAC Geopark, is how it is held up as an exemplary location and connected to other existing or aspiring geoparks. This is conducted through diverse projects, exchanges and linkages, alongside the more formal meeting, conference and workshop commitments that are outlined in

the geoparks charter as being part of the obligations for membership (Frey et al., 2001a). Whilst observing individual geopark responses to this component of the geoparks charter, it is apparent that some geoparks place a greater emphasis than others on fulfilling this outward looking and collaborative aspect of the model. I have observed that MAC Geopark can be seen to take this component of its geoparks status with care and consideration. This has been manifested through activities including; the hosting of the second Global Geoparks Network (GGN) conference in 2006; responding as a partner organization in multiple project consortia with geoparks and other organisations; as well as regularly participating as an active and founding member of the promotional and coordination tool that is the Irish geoparks forum. The third aim of the chapter is hence to consider the impact and importance for the management of Marble Arch Caves Geopark in applying a committed approach to relations and considerations beyond its local geopark consortium, to projecting its interpretation of the geopark model on a global scale.

7.4 - Backdrop to the geopark territory

As introduced at the beginning of the chapter, MAC Geopark has undergone a number of changes and expansions in terms of partners and territory covered. It is useful in this section therefore to briefly outline the most significant shifts - as indicated by MAC Geopark staff during interview - that have been traversed before arriving at the present form of the geopark as observed during my on the ground ethnographic visits. The formal bid for initially a small corner of Fermanagh to become a geopark began around 2000. By that point, Fermanagh district council

had already been a longstanding supporter of geotourism in the area, through its support in helping to establish Marble Arch caves as a show cave site in 1985 (Colgan, 2015). The creation of the show caves was one strand of a response by Fermanagh district council to address the problematic economic and employment situation during the time of the troubles (Rowthorn, 1981; Creamer and O'Keeffe, 2013). The situation at the time, being particularly challenging in the south and west of the county, where it lies in a predominantly rural and uplands area that lies directly adjacent to the political border, which during the conflict meant it suffered from a lack of infrastructural support and integration (Murtagh, 1998).

Figure 19 - Belcoo fortified police station in village at the centre of MAC Geopark. Image taken in 2011 – Expression of the 'peace dividend' as site now redeveloped and station demolished (Jonathan Karkut, March, 2011)

Culminating with the signing of the Belfast Agreement in 1998 (Byrne et al., 2009) and the gradual cessation of hostilities, the borderland setting where the geopark

is located shifted rapidly from being a peripheral geopolitical space into a central area for funds provided particularly by the EU in support of the peace process and cross-border cooperation (Byrne et al., 2009; Creamer and O'Keeffe, 2013). One policy direction chosen by the MAC management grouping, was to incorporate further aspects of research and conservation as well as the existing emphasis on leisure and tourism (Marble Arch Caves interview, 2016). As a part of this move, Fermanagh council came into partnership with the Field Studies Council and worked to host educational institutions in the district around the caves, especially around the Cuilcagh mountain reserve which is the prominent physical backdrop to the caves (The Fermanagh Trust, 2017).

At this point the caves management grouping became aware of the emergence of the geoparks model and network and initiated work to bid for membership in 2000 with the additional support of local and regional public agencies including the Geological Survey of Northern Ireland (GSNI). The concept was strongly supported by Fermanagh District Council in particular, as they had already gained an insight into the potential social and economic benefits of geotourism in the area through their running of the show caves since 1985. The geopark model was thus viewed as a suitable route to progress their policy, and incorporate a broader set of sites around Marble Arch, along the direction of more 'long-term sustainable development' (Marble Arch Caves interview, 2016). The following year on the occasion of the 4th EGN coordination meeting on Lesbos, the Marble arch caves and Cuilcagh Mountain Park as it was then known, successfully joined the EGN (EGN, 2017b).

During the first seven years of its existence, the geopark consisted on the ground of a small pocket of land around the Marble Arch show caves. Throughout its existence as a geopark, Fermanagh district council continued to demonstrate a strong commitment to the development of MAC. This was expressed directly through its operation of the only staffed visitor centre for the geopark, which is located at the entrance to the Marble Arch show cave. The council also employs the majority of the staff associated with the geopark through its payroll. However, one of the challenges in establishing the geopark model on the island of Ireland, was that unlike the situation in England, Wales and Scotland, the land ownership system does not provide the equivalent of a right to roam law (Anderson, 2006; Parker, 2006; Parker and Ravenscroft, 1999). As a consequence outdoor activities including leisure and tourism are mostly restricted to areas of land under public ownership (Mc Keever et al., 2006). In order to grow, the geopark therefore had to bring in further partners. In 2007 this occurred through an agreement with the Northern Ireland Forestry Commission, who are the largest landowners in Northern Ireland (Northern Ireland Land Matters Taskforce, 2015). This new relationship opened up large swathes of land in west Fermanagh, which could be included in the geopark and allow many more trails to be developed around the geopark (Fermanagh District Council, 2008).

Having made that strategic move, during the following year 2008 the geopark management oversaw a second expansion. This involved incorporating areas in the west of county Cavan in the Republic of Ireland and in so doing made MAC Geopark the first international cross-border geopark in the world. On the Cavan side of the geopark some of the most significant geosites that were recognised by the

management team, relate to archaeological and cultural features, as well as further geomorphological locations such as the source of the River Shannon and the waterfalls at Tullydermot. The cross-border form of the geopark in particular opened up new opportunities between Fermanagh and Cavan councils that have reaped substantial benefits through a spread of EU regional and peace and reconciliation programmes. The relationship between these authorities in the context of the geopark, will be expanded upon later in the chapter.

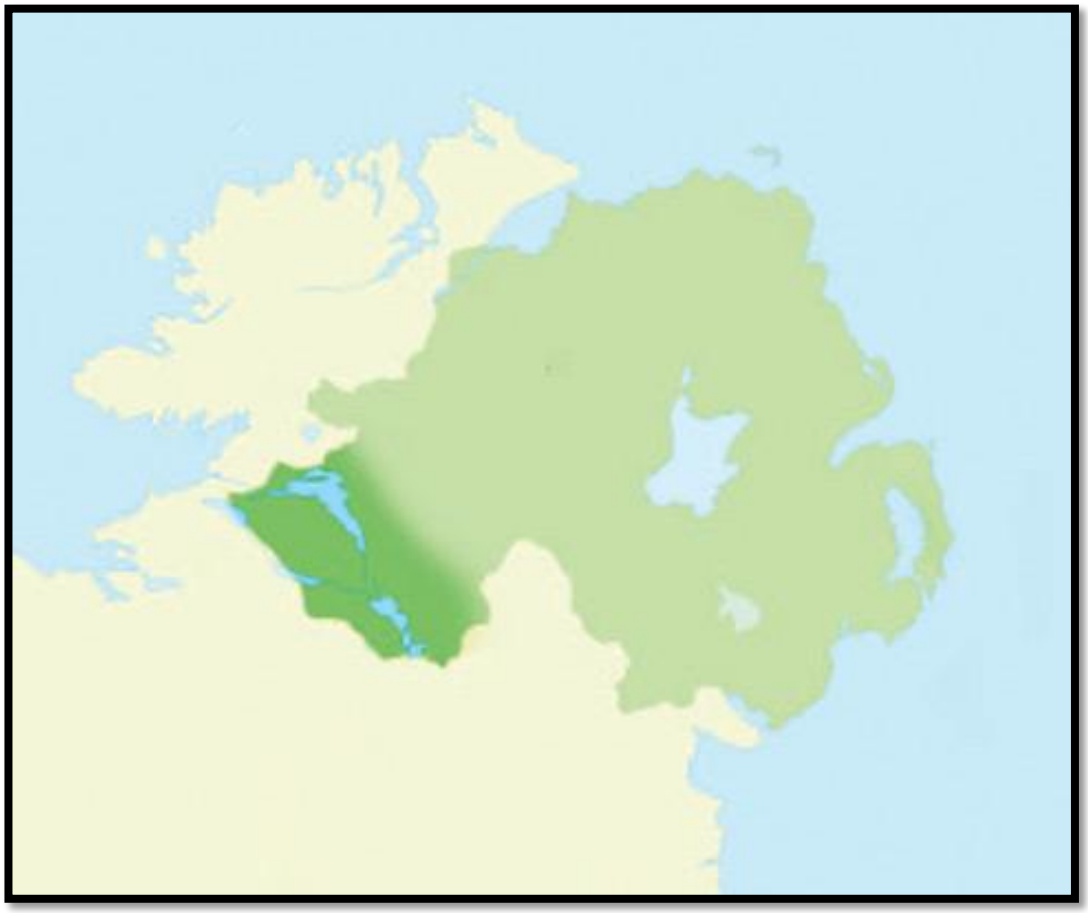

Figure 20 - Location of MAC Geopark (WalkNI.com, 2017)

7.4.1 - How MAC Geopark presents its structure

The following section as with much of the data in this case study chapter is generated from interviews I conducted set alongside other observations I made during multiple visits and engagement with geopark staff online, plus information

gleaned from web based digital documents and resources. As organized in the other two case study chapters, I will initially outline the locations and manner in which the geopark territory through its management consortium, presents its prominent features and how it seeks to portray the partnership and direction of activities it engages in. Then I shall consider how the geopark organization at MAC has formed through a series of interactions, relations and webs of association (Law and Singleton, 2014). Subsequently I shall then express what the geopark appeared like on the ground during my visits and fieldwork and through the individual actors I interviewed and came across. Since geoparks consistently deal with a sequence of landscapes, features, routes and boundaries with a geological connection, an annotated map is often the starting point from which its presentation begins.

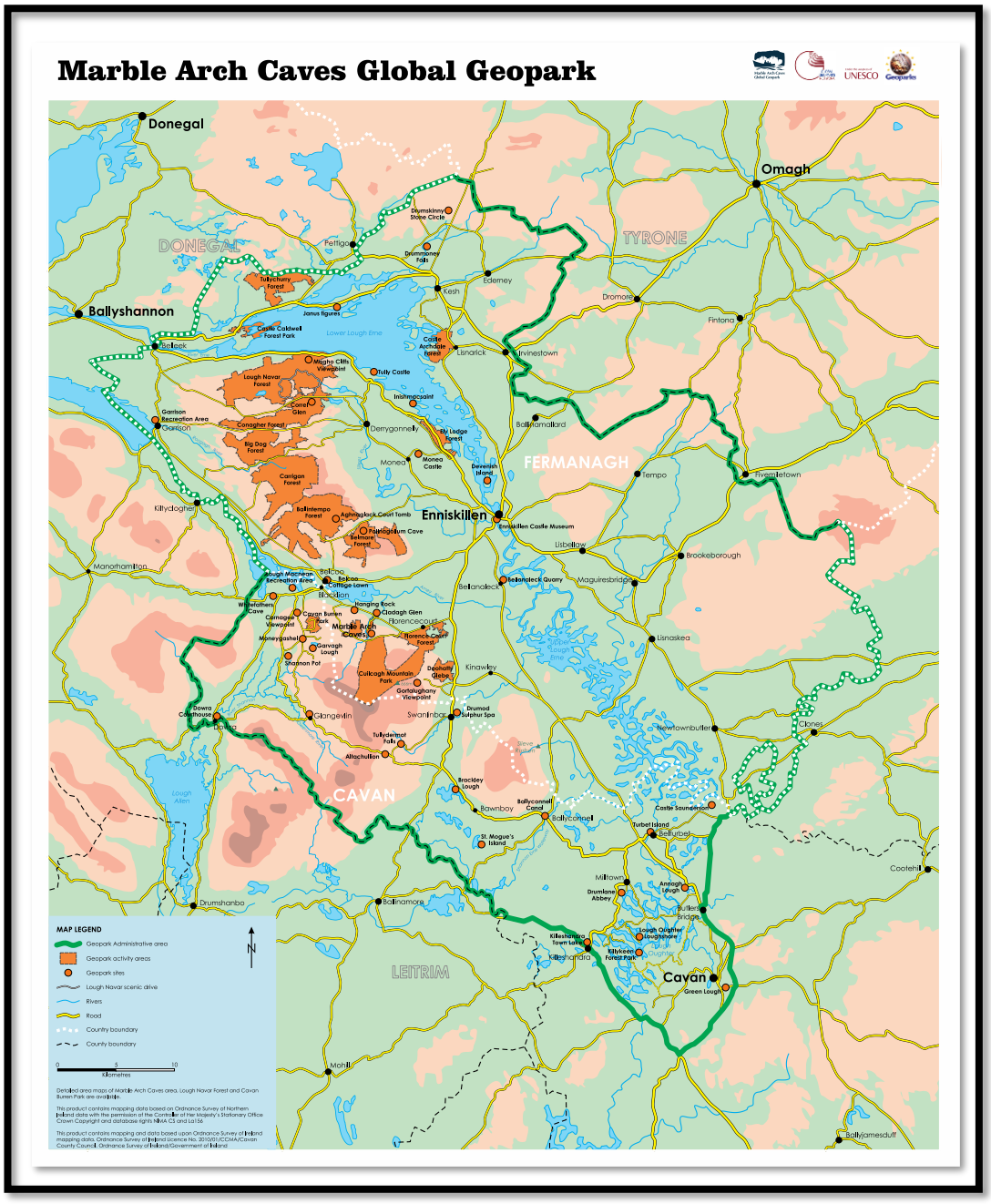

Figure 21 - Relief map and geosites of MAC Geopark (Fermanagh District Council, 2008)

As displayed in the map above, MAC Geopark can be seen to centre around 32 discrete pockets - identified as geosites by the geopark management committee - of public land established within an area of close to 200km^2 spread across the counties of Fermanagh and Cavan (Fermanagh and Omagh District Council, 2017). Again as seen in all of the case study locations, the geosites identified by MAC

reflect the geopark network's interpretation as to what a geosite might include. This ensures that in addition to the physical geological and geomorphological features such as cliffs, rivers, lakes and caves, the geosites reflect other archaeological and historic vestiges and artifacts, as well as further environmental and natural habitat reserves, flora and fauna (Marble Arch Caves Geopark, 2017).

In the case of MAC Geopark, the sites are distributed amongst upland hills, mountains, bogs and woodlands, along with a lower lying area of complex wetlands, lakes, rivers and marshes. In terms of population, at the time the trans-boundary geopark was formed in 2008, the total number of residents was through both counties was 121,000. The county towns and largest urban centres of Enniskillen and Cavan sit on the fringes of the area on which the geopark focuses (Fermanagh District Council, 2008). The issue of land ownership and access ensures that although the county councils are the management partners, the whole territory of Fermanagh and Cavan is not fully accessible for the geopark and the public it interacts with. Instead the connection is most effectively described in this section of the geopark application document,

'While the geopark will not necessarily permit public access to these features, many of them will be interpreted at a distance from viewpoints, on scenic drives, in publications and from vantage points on guided walks' (Fermanagh District Council, 2008).

This statement presents a pragmatic way to apply the geopark concept within a context of land access not experienced within the other case study sites in this

research, and where those challenges require adaptability to the situation on the ground. But what about the form of management and reach of consortium partners arrived by MAC Geopark to move towards implementing that proposed approach?

7.4.2 - Political partnership and management

As we have heard earlier in the chapter, the geopark partnership and boundaries have undergone two significant expansions and these have influenced the structure that has been selected for the management of the geopark. The updated partnership structure was diagrammatically presented in the application form that the geopark made to the European Geoparks Network in 2008 and indicates there are just two agencies involved in the core management team. It outlines an unspecified input from Fermanagh District Council (the manager of the MAC since 1985 and the coordinator of the geopark in its former structure since inception in 2001), and from 2008 onwards alongside them a similar unspecified input from Cavan County Council.

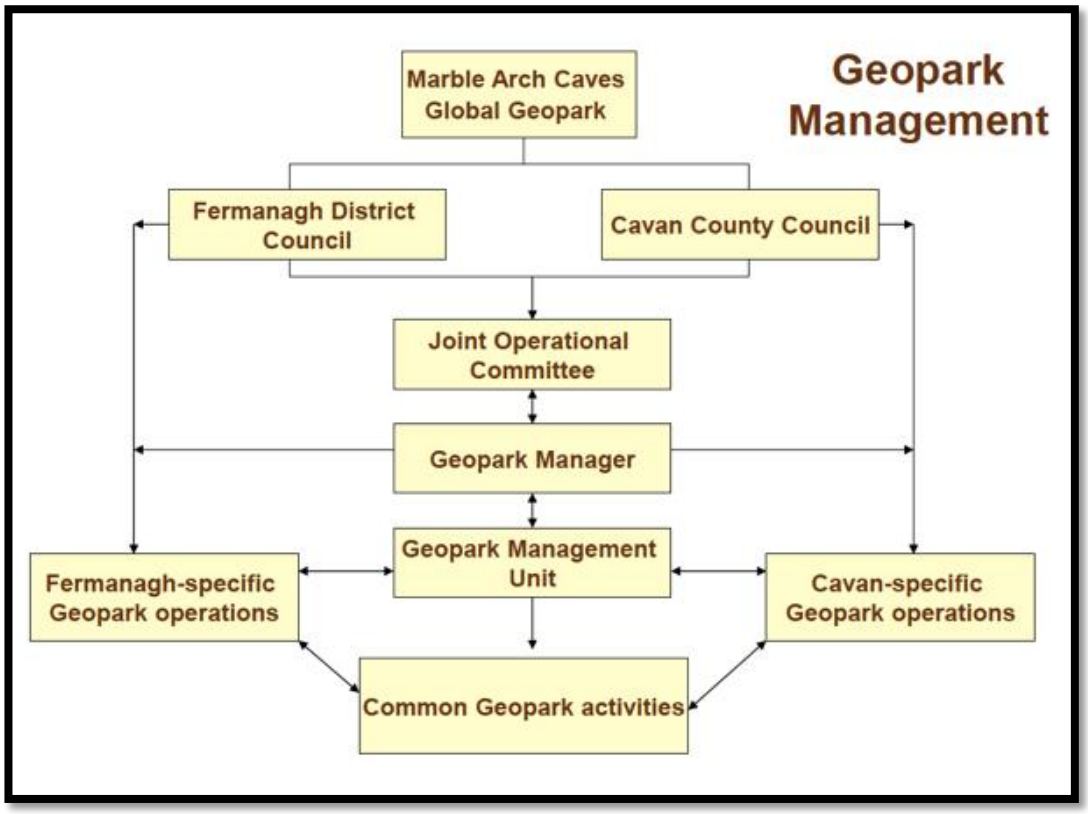

Figure 22 - MAC Geopark organisation diagram (Fermanagh District Council, 2008)

The two councils are identified as being the sole agencies responsible for day to day coordination and management of MAC Geopark. The functions within the management structure for particular staff and tasks within the councils are described thus,

'The overall Geopark will be overseen by a Joint Committee made up of senior representatives of Fermanagh District Council and Cavan County Council who will deal with the strategic direction of the expanded Geopark . A Geopark Management Unit made up of key staff from Fermanagh District Council and Cavan County Council will deal with management and development issues associated with the Geopark under the direction of the Geopark Manager'. (Fermanagh District Council, 2008)

Reflecting the desire to bring further access to other public lands in the geopark, additional strategic partner agencies are named as being the Forest Service of Northern Ireland and the equivalent in the Republic of Ireland which is Coillte Teoranta. Specific memoranda of understanding exist with those agencies to allow coordination of staff and responsibilities within the geopark boundaries (personal communication MAC management, 2011). Beyond that grouping, further organisations that support the activities of the geopark are identified as being those government structures responsible for earth science, nature conservation, cultural heritage, and tourism promotion at a local and regional level. A number of those organizations own and manage properties that lie within the geopark boundaries. The arrangement in these cases is that the organisations continued to run those attractions but acknowledge MAC Geopark and sometimes run coordinated events alongside the geopark (Marble Arch Caves interview, 2015). Additionally MAC Geopark has been provided with expert advice, information and partnership in projects relating to 'research, education and conservation' (Fermanagh District Council, 2008) by the two geological agencies in the region, Geological Survey of Northern Ireland (GSNI), and the Geological Survey of Ireland (GSI).

Since its inception in 2001, the designated MAC Geopark manager has been the same individual who has been employed through Fermanagh District Council. Over the same period of time however, the senior representatives on the councils in Fermanagh and Cavan have altered as staff have moved in or out of posts (Marble Arch Caves interview, 2017b). Also during the period that the geopark has

operated, there have been a number of changes in government structures. As a consequence agencies that had been partnered by the geopark have been restructured and their functions, responsibilities and services moved around or organized into different departments. One of the most significant recent alterations has been the reforming of local councils in Northern Ireland when 26 former councils became 11 new councils. Thus from April 2015 the Fermanagh District Council was merged with its neighbouring county to become Fermanagh and Omagh District Council. As well as the change in boundaries, the functions operated by the council were also altered so that more direct responsibility was taken for policy aspects including planning and development (UK Government, 2017). Collectively these alterations, combined with the closing tenth anniversary of the trans-boundary relationship forged by MAC Geopark, stimulated the district council to call a tender in order to make suggestions for a governance, management and development plan (Marble Arch Caves interview, 2017b).

The changes in boundaries, partnering agencies and responsibilities that are presented above, may seem to resonate with the type of economic and political fluctuations that were mapped out during the Katla Geopark case study chapter. In that situation, those shifts had an influence on the extent to which Katla Geopark could achieve its aspired development. But what does the situation in MAC Geopark look like on the ground? The following section based around my ethnographic contact with MAC Geopark, examines how the management style and structure is manifested, and how local stakeholder groups or individuals see and experience the geopark.

My ethnographic engagement with MAC Geopark, follows a similar format to those applied during the other two case studies in Katla and English Riviera. Rapid immersion field visits were used to conduct semi-structured interviews with existing and former staff members of the geopark management team, along with local businesses, tourist visitors and members of other organisations that partner MAC Geopark. Initially as a newcomer to the geopark landscapes, I was driven and shown around to the geosites and activities that the geopark staff themselves considered it worthwhile and appropriate for me to visit. Later on in my more recent visits, I could draw upon a greater familiarity with the location and had an opportunity to drive myself around other corners of the geopark where I'd previously not ventured. As MAC Geopark was the first geopark territory I stepped foot in and also through its high profile within the geoparks network, I have been present at more presentations and in different settings and contexts (such as during Irish Geoparks Forum meetings, and at numerous EGN or GGN conferences) than the other case studies. Once again I further complemented the immediate research on the ground in the geopark or in locations where the geopark network was manifested (i.e. geopark conferences and forums), with web-based exchanges with staff and geopark partners, notably via Facebook, Skype and What'sApp on mobile devices.

7.4.3 - What MAC Geopark looks like on the ground

My initial introduction to the MAC Geopark was facilitated through two core staff from the management unit of the geopark who had been integral in establishing it within the European and Global geoparks networks. Having staged EGN meetings, GGN conference trips, introductions to the model for a wide array of existing and

aspiring geopark sites, as well as for local stakeholders and visitors, they were both considerably experienced at hosting visits and tours around the geopark for a wide range of groups and individuals (UNESCO interview, 2009). The route and aspects of the geopark I was shown around therefore had the feel they consisted of the most prominent, accessible and representative of what the MAC management grouping sought to present to the visitor.

Arriving by public transport from Belfast, the access to the geopark is through Enniskillen, the administrative centre for Fermanagh district council (as it was until 2015) and where the inter-city bus is routed. From there during most of my visits I would be driven directly to the principal visitor centre and headquarters of the geopark at the Marble Arch Caves themselves. This is where the majority of staff are based, whilst the site is geographically at the centre of geopark territory. The drive between Enniskillen and MAC provides a useful introduction as to what the geopark looks like in physical terms. The landscapes I observed were a combination of rolling upland hills and mountains sometimes covered in blanket bog, and other times by wooded slopes or grazing fields. At the base of those uplands are found a complex system of broad valleys occupied by meandering rivers linking larger and smaller lakes with numerous small islands dotted within the waters. On the map the waterways form a rough figure of eight with the twin villages of Belcoo and Blacklion sitting in the middle where the two loops meet (see Figure 7). The break in slopes between the uplands and the lower wetlands, are often marked by cliffs or stark rocky outcrops.

With respect to infrastructure, the larger centres of population lie at the fringes of the geopark boundary. Inside the geopark territory, the landscapes are dotted with small villages where livestock farming is the dominant activity. As regards the specific sites and material manifestations of the geopark, besides the visitor centre at the caves, there are two smaller visitor centres in the village of Blacklion and another in the countryside a few kilometres outside of the village near to the entrance car park for Cavan Burren park. Whilst travelling around the prominent geosites marking geological, archaeological or cultural heritage, many of those sites and the obvious viewpoints and panoramas are marked with generally well maintained information and interpretation panels. In terms of familiarity with the destination as a whole, it is immediately apparent that to the visiting public and local residents alike, the caves are viewed as the hub and best known feature of the geopark.

7.4.4 – Marble Arch show cave and visitor centre

The Marble Arch caves site is located at the heart of the geopark both in terms of geography, administration and management, although the visitor centre is currently not served by public transport, with the nearest bus stop situated in Blacklion some 10km away. Nonetheless, its prominence has meant that the identifier and prefix 'Marble Arch caves' has been retained all through the period of development that has seen it evolve from a show cave to a small geopark, and finally a larger trans-boundary international geopark. The importance of the caves as a focal attraction for the geopark has also been reflected in the material developments and benefits applied to the site. Signage to the locality is provided from all main thoroughfares and as it has grown in visitation (capacity with

current staff numbers is approximately 60,000 visitors a year), the parking facilities, enlargement and rehabilitation of the buildings have been built up as opportunities to upgrade and renew have been taken (Marble Arch Caves interview, 2017b).

Through grants from a series of EU funded projects that the geopark and neighbouring counties have been able to secure, the site has built up. Initially there was simply an entrance way to the cave system, which as infrastructure was added, became transformed into a high quality facility that functions also to introduce the MAC Geopark and how it has emerged. Stretching on to multiple levels, the buildings now include a spacious reception area that houses the ticket office, a gift shop and a museum relating to the caves themselves, plus an introduction to MAC Geopark as well as the European and global geopark networks. The building also has offices and meeting rooms for the seven full time staff responsible for the organization and administration of the geopark. The room facilities can also be used for other educational activities. Downstairs is a further exhibition area, a café and then the entrance way to the show cave. I have visited the site both during the season when the caves are open March-October and whilst the centre is officially closed to the public and only operates as an administrative hub. Beyond the physical structures, there are walking paths and trails in the grounds around which form the Marble Arch National Nature Reserve, in what remains a relatively remote corner of borderlands Ireland.

The second information centre utilized by the geopark is situated on the main Sligo-Enniskillen road, in the village of Blacklion, that lies directly on the border

between the Republic of Ireland and Northern Ireland. The building in which it is housed is called the Market House and works as a multi-function facility utilized by a number of local community groups in additional to the geopark management team. The Market House is often used as a location for talks and workshops concerning the geopark, or as a meeting point for other walks and tours organised through the geopark (Marble Arch Caves Geopark, 2017). Formerly the district court house, the building has been renovated and fitted out through the use of EU project funds and now houses a general tourist information centre for the region, plus a dedicated room where an exhibition and introduction to the geopark with audio-visual materials are found, as well as maps, leaflets and guides. Upstairs is a larger meeting room where local clubs and events can use the space and where the larger talks or workshops can be staged (Businessperson in MAC Geopark, 2017a).

Figure 23 - Market House community centre and information centre in Black Lion, showing MAC Geopark exhibition materials (Jonathan Karkut, March 2017)

Beyond those two sites, the other significant locality I visited, that is used as a hub for activities and events relating to the geopark, is the Interpretative Centre at Cavan Burren park. Found some 6km south of Blacklion on a dramatic limestone hilltop setting, the term Burren is used as a place name in a number of localities around Ireland, as it is derived from the Irish word "Boíreann" that is used generally to describe a rocky place. This particular Burren is a location where significant megalithic tombs and other pre-historic monuments are found, and is regarded as a mythical place with spiritual attachments to the landscape (personal communication Jim, local tour guide, 2011). I visited the site and observed it develop from hosting just a few interpretation boards when I was first driven up to the park, to the present situation where an innovatively designed stone structure forms the framework for a year-round unstaffed centre which presents information on the geology, archaeology, natural environment and cultural heritage of the locale. Constructed in 2014 again through funds derived from an EU regional development project, the interpretation area is open at one end but covered with a roof for protection from the elements. A continuation of the structure provides other rooms where there are toilet facilities, a kitchen area, plus small meeting room. As with the other two centres, the one at Cavan Burren park operates as a hub and meeting point for both independent and organized events and activities which are organized or promoted through the geopark management team(Marble Arch Caves interview, 2017b).

7.4.5 – Geosites as concentrations of activity

Beyond the three visitor and interpretation centres, following a similar pattern to the other case study geoparks, it is noticeable that the focus of activities and

visitation is directed on the ground through the various geosites. In MAC Geopark a total of 55 geological and non-geological sites were identified in 2008 when its territory was extended into Cavan county (Fermanagh District Council, 2008). Covering a broad relationship with the landscapes of the geopark, the sites include geological and geomorphological features both above the surface and in subterranean settings, alongside other locales with a natural habitat focus in particular towards forested and wetlands areas. As introduced at the Cavan Burren park, the MAC Geopark also places an emphasis on other geosites that feature ancient archaeological heritage, and more recent historical cultural heritage including early Christian monasteries and Plantation Castles (Marble Arch Caves Geopark, 2017).

The 55 selected sites also reflect the partnerships the MAC Geopark has formed with various mostly public agencies, and the accessibility those linkages bring for the wider public at the geosites. For instance in terms of trails, walks and more general access, the areas owned by the Forestry Service in Northern Ireland, and Coillte Teoranta provide the largest sweep of territory and in particular ensure that attractions and interest for the visitor is spread out beyond the original core area of the geopark around Marble Arch caves and Cuilcagh mountain park. As I recognized in the other case study geoparks, not all of the geosites mapped out for the applications or management plans, are identified to be of direct interest or access to the general public. Some have a greater significance for research and other educational needs in the geopark, or for specialist interest groups such as to speleologists. To the everyday visitor or resident, the geopark management team has concentrated on placing the focus around eighteen geopark sites that are

highlighted on the current 'geopark visitor map' (Marble Arch Caves Geopark, 2017).

Having driven to the majority of those eighteen geopark sites, and spoken about them with a variety of geopark stakeholders, it is apparent they are selected for ease of accessibility, visibility, and ease of reach on guided or self-guided tours (Marble Arch Caves interview, 2015). At the same time, their siting on the geopark visitor map, shows a broadly even spread across the geopark in an effort to both introduce a mixture of geological and non-geological points of interest and to showcase or steer the visitor to all corners of the geopark rather than just the 'honey pot' attractions that are already more familiar. This special arrangement reflects one of the outline objectives of the geopark development, that is to bring benefits to the geopark overall, not only to specific pockets (Fermanagh District Council, 2008). The majority of these eighteen geopark sites have also been incorporated into one or more of the regional development projects, and consequently benefited from updated signage, interpretation or promotional support. The tourism development agencies at regional level in the form of Fermanagh Lakeland Tourism and Cavan Tourism, or at national level in the shape of Failte Ireland and Tourism Northern Ireland, have collaborated closely with the geopark to assist in the aims of spreading visitation around the wider territory and raise the visibility of attractions around the geopark (Marble Arch Caves interview, 2017b).

7.4.6 - Overall layout of the geopark

Considering MAC Geopark has evolved and expanded over several phases at different times, the overarching view I have taken away following my visits on the ground, is that there are a broad and even scattering of geosites and areas spread around the geopark territory in both partner counties. Those sites have seen the benefits in regards to infrastructure development and funding through numerous projects, which the geopark management team has helped to implement. However, one of the challenges that I observed and has also been highlighted by MAC staff interviewed (Marble Arch Caves interview, 2015) is in stimulating routes, corridors and other approaches to help guide visitors move around and encourage them to connect and visit different elements of the geopark.

Unlike the other two case studies where there is an overarching and prominent route or progression between sites - in the English Riviera Geopark that was the coast road sweeping around Torbay and connecting Brixham, Peignton and Torquay. In Katla Geopark the ringroad was the thread sweeping through the three villages and municipalities along with the more accessible geosites. In MAC Geopark, a web of routes exists which spreads out from the administrative centres and largest towns of Enniskillen and Cavan. Once the geopark had expanded beyond the single central feature of the show caves, then the spread of geosites across west Fermanagh and west Cavan counties meant no individual facet of infrastructure could be described as joining or guiding together those sites. One small tourism business owner whom I interviewed on different occasions, expressed it thus:

"We say to people are you going home now (back to Dublin or wherever) well do you have time to go to Florencecourt House that's just like on your way home. Or other than that there are kind of forests and things overlooking Loch Erne, which are fantastic. But people coming up from Dublin would probably get lost trying to find it". (Businessperson in MAC Geopark, 2017a)

Nonetheless, once I had gathered and read promotional and information materials, I found it possible to connect together a sequence of landscapes and features around the territory. Whilst moving around independently, it was possible to come across a number of roadside interpretation panels particularly at prominent viewpoints and panoramas, which helped in gaining a further appreciation of MAC Geopark as a whole. These were necessary as the overarching perspective of the geopark is that it remains within a quiet rural setting where the points of development and interest are scattered around widely and sometimes well off the main arterial roads. Navigation around the geopark, although it is still compact at just under 200km^2 as compared with for instance the Katla Geopark at nearly 10,000km^2, is not always immediately obvious.

But as indicated across my observations from MAC Geopark, that is not for want of funding and development opportunities. I lost count of the plaques on buildings, interpretation panels, way findings signs, heritage sites and a number of other geopark materials all indicating they came into position through successful applications towards a variety of European Union funding programmes. Those observations were confirmed when interviewing key staff members from the MAC management team.

"We've done well out of European funding especially in the last few years, and we've mainly focused on the INTERREG programmme in the Irish border region for no other reason than the fact that the two Northern Ireland and the Irish governments made up the European funding". (Marble Arch Caves interview, 2017b)

Figure 24 – Boardwalk over wetlands landscape leading to Cuilcach Mountain which marks the Irish border region – one of many infrastructure projects in MAC Geopark benefiting from EU funding (Jonathan Karkut, March 2017)

The programme mentioned above, along with a number of others relating to the Northern Ireland peace process and regional development are amongst the core funding and policy routes that MAC Geopark has utilized most to assist its development aims. The funding travels directly through the geopark partner councils, but it is filtered, managed and channeled into the region particularly

through two other agencies - the Special EU Programmes Body (SEUPB) in the management position, and Irish Central Border Area Network (ICBAN) as an implementation structure for the cross-border region in which the geopark is located (Colgan, 2015). But what are the ways in which MAC Geopark has interacted and adapted to these opportunities? How have the projects they fund been guided and help shape the geopark that is now visible. The next section of this chapter examines these points in greater detail. In particular it considers how and which policy processes have influenced the evolving MAC Geopark at different stages in its emergence to becoming a showcase geopark for the UNESCO network. How are those processes manifested and in what ways has the management and governance of MAC Geopark been of significance?

7.5 - Policy across the borderlands region around MAC Geopark

Before considering the areas of policy presently contributing to the shape and direction of the MAC Geopark today, and how the realization of those policies is manifested, it is important to recall that the drive by local government to use geotourism and the natural landscapes to contribute towards local development in Fermanagh, came many years before the geoparks model. Indeed one of the core members of the geopark management team outlined that 'Marble Arch caves and Cuilcagh mountain park pre-existed geoparks' and as one of the initial wave of EGN members at the turn of the millennium, "were quite elementary towards helping to develop the whole geopark ethos and procedures" (Marble Arch Caves interview, 2017b). So what emerged as the trans-boundary MAC Geopark at least initially contributed towards shaping policy through interactions internally with the

nascent EGN, rather than being more substantially led by policy directives subsequently derived from the EGN committees at a later stage.

The embracing of the concept, and commitment towards the development of geotourism by Fermanagh district council (and since 2015 Fermanagh and Omagh council) cannot be underestimated particularly when considering governmental engagement as seen in other geoparks such as those explored in the case study sites. In addition to retaining within their payroll for seven full-time geopark staff, the council also funds four seasonal geopark rangers to maintain the geopark facilities. The show caves are open from March and the season now extends to October. During this period an increasing number of seasonal staff build up the total employed by the geopark to over fifty at the height of the summer holidays (Marble Arch Caves interview, 2017b). The majority of those seasonal staff are students, along with some retired people, but always with a pre-requisite of having knowledge, experience and interest in the local landscapes, heritage and geology (Marble Arch Caves interview, 2015). This means that particularly over the summer: "There is a big team, but the majority are focused on delivering the tourist attraction at the caves. Whilst those working on the geopark management is a very small team". (Marble Arch Caves interview, 2017b)

This last statement is more significant than it may initially look. The gravitational pull of a central tourist attraction that now brings in over 60,000 visitors (Marble Arch Caves Geopark, 2017) to a remote rural corner of the country, has led to a situation where much of the human resources are tied into successfully running that site. Its success was explained to me in terms of tourist numbers, local

employment, positive feelings and pride about the locality, alongside the active role of MAC Geopark in the EGN and in numerous EU projects (as will be outlined later in the chapter), which in turn have ensured that the management team often find themselves considering the potential for the area along with ideas and plans, but then reflecting back on the limited staff numbers to deliver them (Marble Arch Caves interview, 2016). The dilemma this poses, with needs for the consolidation of a core activity alongside an expansion into further aspects of geopark activity, was expressed by several MAC Geopark management staff on different occasions. But it was most effectively articulated by one more recent addition to the team who explained:

"It needs to keep growing and growing. And that's what I mean about geoparks being a living thing. They are and this place is continually growing and developing which is exciting. Its good fun but things like the education side of things we don't have enough time to develop those. But that's something we definitely need to look at and something that there's so much potential, like we've got so many natural resources waiting to be used for that". (Marble Arch Caves interview, 2017b)

The circumstances and order the show caves and geopark partnerships emerged, continue to influence the manner in which the management team approaches such dilemmas or policy directions. Through being one of the formative early members of the EGN and having devised a number of policy aspects through the operation and management of the MAC show caves, which are now in turn embedded into the geoparks charter, the MAC Geopark management did not arrive at the position of externally applying the fully devised geoparks model. Rather through being an

influential contributor towards the formalizing of the model, MAC Geopark has "sort of grown organically without any real forward planning, and we've done a bit and then we've decided another bit, and we've taken advantage of opportunities and stuff" (Marble Arch Caves interview, 2015). Reflecting upon this situation, another senior member of the geopark management team expressed that,

"it's been ad hoc to some extent. More ad hoc than I would like, or it's at least been driven too much by personnel on the ground – sometimes almost unknown to the higher authorities if you like and that can be a good thing, but at the end of the day if you're embroiled in a well thought out and well-structured strategic plan it opens other doors for you" (Marble Arch Caves interview, 2017b).

The 'higher authorities' referred to in the statement above, are the senior management and councilors of Fermanagh and Cavan councils. This indicates that the day-to-day running of the geopark is conducted through staff who are 'junior' within the wider council structures. As long as progress, projects and the attractions are considered to be functioning well, then the 'higher authorities' which have many further tasks and responsibilities have limited contact with the geopark operation and are satisfied to let those staff continue unhindered (Marble Arch Caves interview, 2016). The running of the geopark also includes collaborative projects and the commitments towards the EGN. So the contacts at UNESCO and the EGN view the MAC Geopark as being run by the immediate geopark staff who attend meetings and conferences – but these are more 'junior' staff within the council hierarchy.

7.5.1 - Policy and governance across a trans-boundary geopark

With the expansion from 2008 onwards over into Cavan county council territory, the relationship between authorities and staff in the now jointly managed and run MAC Geopark created a significantly more complex association of agents than previously experienced. The challenges identified in the two councils of Fermanagh and Cavan, which function according to different jurisdictional structures, operations and responsibilities, was recognised by the geopark management team (Marble Arch Caves interview, 2015). The experience of operating a tourist attraction since 1985, and of organizing an active geopark in a rapidly expanding European Geoparks Network since 2001, ensured that the component of the MAC Geopark management team employed through Fermanagh council have been able to share their understanding of applying policies on a working basis and support the newer partner in Cavan. Actors from both councils expressed that at this, what they describe as the 'operational level', they are meeting and collaborating on a regular basis and sharing a positive relationship (Marble Arch Caves interview, 2015). One strategy applied to express the collaboration has been the development of a cross-border events programme that is mutually shared by both counties. It was impressed to me that even if people were not attending events in the other county to where they are resident, the programme still serves to highlight that MAC Geopark is a cross-border entity and reminds individuals about the issues and manner in which the geopark is helping to integrate the borderlands region in a practical way (Marble Arch Caves interview, 2017b).

More specifically regarding the governance of MAC Geopark, it was regularly expressed that the cooperation at the geopark management team level has functioned well overall. One facet that was picked up by the geopark management staff during interview however, was that although the geopark was being jointly managed, it was not deemed appropriate or possible for staff from one council to be too heavy handed in directing colleagues from the other council. Nonetheless, through attended meetings and other activities both on site in the geopark and beyond at geopark network events in Ireland and abroad, the overarching sense of all partners working in a common direction for the MAC Geopark development was observable. Those linkages however were not completely replicated at the senior management level. This separation across tiers within government agencies, was elaborated upon by one MAC Geopark informant who stated,

"I suppose that's inevitable because the geopark management team is essentially focused on the geopark whilst the senior management of both councils have a huge raft of other things to think about. So the geopark is only one of those, and if the geopark is moving along well and there are no apparent problems, then its relatively seamless. It puts it even less high on their priorities if you like. They say, 'that's working well and we don't have to do very much'. So that's a bit of frustration because it means that you can't get a unified hearing in terms of the issues that we do have". (Marble Arch Caves interview, 2017b)

Included in activities at the operational level are considerations as to which funding streams are best approached and how they can fit into the development of MAC Geopark. In part due to past successes in accessing European Union funding,

the signing off of bids by senior staff has been possible, but the step between what the geopark management team describe as being their 'junior' level (that's operational on the ground staff) and 'senior' (higher managerial and political staff at the council headquarters and in central government), always ensures you 'have to fight your own corner' (Marble Arch Caves interview, 2016). In terms of strategy, MAC Geopark management team have focused particularly in the past decade on securing EU INTERREG funds in the central Irish border region. One of the principal reasons behind this is that the Councils can secure effectively 100% funding since the grant is worth 75% and as it is drawn from a programme specifically adapted to support the implementation of the Northern Ireland peace process, the 25% match funding is made up directly by the Northern Ireland and Irish republic central governments.

This contrasts with many of the other EU regional development programmes which function on a wider Pan-European basis and are devised along broader international partnerships. Those generally provide 50% funding directly from the EU, leaving the partners to secure the remaining 50% from other sources. MAC Geopark have worked within these types of programme as well, which generally operate with more partner organisations and an overall budget that is spread more thinly between partners. One long-standing member of the MAC management team, impressed that a net effect "with these type of European projects you really have to do almost the same amount of work whether the budget is 2 million euros or 200 thousand". (Marble Arch Caves interview, 2017b)

The core focus and outcomes from these major projects have contributed towards development in terms of infrastructure, interpretation and the physical representation of the tourism products at the destination itself (Marble Arch Caves interview, 2016). The explanation for this emphasis was given as being due in part to the division of responsibilities and actions held in the different levels of government (Marble Arch Caves interview, 2015). The situation was demonstrated using the example of the approach and authority to create and place road signage. On the Republic of Ireland side of the geopark, Cavan county council as the roads authority for county Cavan, is responsible for 'whatever signs it wants' (Marble Arch Caves interview, 2017b). Whilst under the jurisdiction in Northern Ireland, the road services department of central government in Belfast is responsible for all decisions there and operates according to national guidelines. These stipulate that "you can only have a brown heritage sign up to 10miles away from a site, and you can't put up a sign that is more prominent or in any way advertorial". (Marble Arch Caves interview, 2016)

As a consequence, the MAC Geopark management team is eager to ease this policy challenge and understand how they may bring the different tiers of government and associated agencies functioning more collaboratively. Several actors in the management team explained that they have observed a precedent and possible solution to this,

"You know because I don't think the same issues happen in terms of the Giant's Causeway UNESCO WHS. You see there seems to be a national game plan for helping to develop there with signage, roads, maintenance all of that stuff, arterial

routes and everything. But there isn't one for the Marble Arch Caves UNESCO global geopark. Even though the world heritage and geoparks are the same pecking order as far as UNESCO is concerned. That seems to happen with many civil servants. Maybe its starting to change at the higher levels, but getting it to filter down to actions at the ground level". (Marble Arch Caves interview, 2017b)

Reflecting over the period in particular since the geopark extended into becoming a trans-boundary operation almost a decade ago, the management group is now seeking to pull together some options to consider how they may contribute towards addressing the types of issue introduced above. In turn the aspiration is to devise a management strategy that is encompassing across both the operational and more strategic managerial considerations, which would have to consider how to bridge jurisdictional and policy differences (Marble Arch Caves interview, 2015).

7.5.2 - Tourism and leisure policies

As introduced earlier in this chapter, Marble Arch caves were identified by Fermanagh district council to be utilized as a geotourism attraction more than a decade before the site was positioning at the centre of the first iteration of MAC Geopark in 2001. Throughout that initial period the emphasis was upon optimizing the economic and employment value of the show caves, alongside a lesser conservation and educational component that would support and sustain the developmental role of the site (Marble Arch Caves interview, 2015). Input and interaction through tourism policies and related agencies from outside of Fermanagh, did not occur until the practical administrations were created to

physically implement the articles of the Belfast Agreement of Good Friday, in this circumstance that relate to the tourism sector (Bush and Houston, 2011; Teague and Henderson, 2006). A significant aspect for the Irish borderlands located MAC Geopark flowing from the Belfast Agreement was how it placed a practical emphasis and active promotion upon cross-border collaboration and 'identified six designated areas of cooperation, transport, agriculture, education, health, environment and tourism' (Teague and Henderson, 2006).

There are two structures in particular that emerged around this process, which are of relevance to the channelling of policy impacting upon MAC Geopark. In 1995, a collaborative organization influencing a range of policy sectors in the Fermanagh borderlands region, was established as one of 3 cross-border local government networks. The Irish Central Border Area Network (ICBAN) became the conduit for significant nationally and internationally sourced funding opportunities. 'Whilst individual councils make a financial contribution to fund the network, it is access to EU or International Fund for Ireland funds that provides the motivation for the creation and sustaining of these arrangements. The activity of these networks has influenced public policy thinking on tourism in each jurisdiction' (Teague and Henderson, 2006).

Additionally in the tourism sector, a new agency promoting the whole island of Ireland abroad was established. Named 'Tourism Ireland Ltd.', the agency supported by the existing state tourism agencies of Northern Ireland Tourism Board and Fáilte Ireland, was established by the Northern Ireland Executive and the Republic of Ireland Government, under the auspices of the North South

Ministerial Council (NSMC). It was incorporated on 11 December 2000. The company takes policy direction from the NSMC and works closely with Fáilte Ireland and Tourism Northern Ireland. Around the same time as the creation of Tourism Ireland, a more local structure for the promotion of leisure and tourism in Fermanagh was also formed. The Fermanagh Lakelands Tourism organization was structured as a public-private partnership (PPP) with half its resources coming from the local council, and half through a private sector membership scheme (Marble Arch Caves interview, 2017b). As these agencies both support the activities of the geopark and act as pathways to joint funding and development opportunities, the geopark management team fostered close relations with them. As project opportunities arose, specific partnership consortia were devised (Marble Arch Caves interview, 2015).

A response to this approach, was that not only the MAC Geopark, but beneficiaries in the tourism sector in the Irish borderlands more widely, followed an opportunistic policy of responding to where the money flowed (Marble Arch Caves interview, 2017b). Those finances were most prominently drawn from major European Union structural and regional development funds, in particular the INTERREG and PEACE programmes which were the main tools devised through the EU to support the emerging peace process following paramilitary ceasefires in the 1990s and then the implementation of the Belfast Agreement after 1998 (Karari et al., 2013). Especially throughout the period from 1999-2008 during which MAC Geopark was initially created and developed, opportunities presented through the EU structural funds were predominantly taken in a direction where there was, “a certain emphasis on the visitor, but overall if you had enough money

to build something like heritage centres, buildings, infrastructure and all that, that's what happened. It was all capital driven". (Fáilte Ireland, 2013)

7.5.3 - Entrepreneurship and private sector engagement

Amidst such efforts to connect strands of the tourism sector together across MAC Geopark, it was apparent from interviews I conducted with small enterprises and business people that the position and experiences expressed in the private sector were sometimes not at the centre of considerations. This was expressed most directly by one state level tourism promotional agency when reflecting on the situation concerning tourism and geoparks development in Ireland,

"If the businesses in the area don't know what geotourism or geoparks is about, then they can't relay that to the visitors that are staying with them. Those businesses have to know what the project is about and be brought along with it as they are the front line of visitor engagement". (Fáilte Ireland, 2013)

In pursuing how small businesses and enterprises responded or interpreted tourism and geopark development policy on the ground, I took the opportunity to hear the perspectives from a spread of services in a variety of locations within MAC Geopark. The initial view from accommodation providers interviewed in the main villages that provided for the tourism sector was that individual tourists had not been expressing that they'd come to the destination specifically for the geopark. There was an acknowledgement about the success of Marble Arch caves as a particular attraction, but the small business owners struggled to mention more than one or two other sites around MAC Geopark (Businessperson in MAC

Geopark, 2017a). It was apparent however, that the MAC management team had sought to reach out and explain the concept of the geopark to a broad sweep of community stakeholder groups. Through attending a number of events organized by MAC Geopark, it was expressed by those SME owners interviewed, that besides raising awareness of the geopark itself, the geopark team had been working to engage and present how other groups might connect with the process. However, these opportunities were seen by the SMEs to be "talking about grants for doing stuff. It was more for community groups rather than businesses like ours". (Businessperson in MAC Geopark, 2017a)

One other point raised from the side of the small business owners, was that it was useful and appreciated to know what the policy for MAC Geopark as a whole was. But they were struggling to see how their particular businesses could adapt and be at the heart of the geopark as was outlined to them during the geopark briefings they attended. An example was given for instance when speaking about the Marble Arch show caves. Although close by to the attraction, the business owner mentioned that if there were no specific reasons to visit his village, then tourists don't stop. He added that his business is too small to accommodate a coach load of guests, but coach transportation is a large component of arrivals at the caves. Further relating to other entrepreneurial activity locally, this business owner went on to explain what he saw as being a telling anecdote:

"during the boom years of the Celtic tiger a local builder built the large commercial building and also some other houses locally. He then rather than focusing on one business set up a supermarket, plus another couple of different shops. These

ventures all failed because of the overall lack of quality and business understanding. The fella was trying to spread his bets but ended up doing everything poorly rather than concentrate on doing one thing well". (Businessperson in MAC Geopark, 2017a)

The parting message from the business end of the tourism sector can be summarized as indicating that there was interest and appreciation of the geopark, particularly in how it had been influential in drawing down significant funding and development. However, there was equally a desire to understand more clearly how individual services could connect with the success of the core attractions and feel a part of a broader web of destinations and themed routes around the borderlands region. Similar reflections on the situation were expressed by national tourism agencies. On the occasion of an Irish geoparks forum, one speaker reflected that,

"Networking with the tourism businesses is crucial. It is important to cultivate them as your ambassadors and assist them to build on the broad geopark proposition. In this manner you can aim to ensure the concept is well knitted into the place for when the funding finishes". (Fáilte Ireland, 2013)

It had been hoped by municipal government authorities, local tourism businesses and MAC Geopark management (Marble Arch Caves interview, 2017b) that local tourism promotional agencies such as Fermanagh Lakelands Tourism (FLT), would contribute towards bridging such gaps, but their performance was given a mixed reception amongst those business owners interviewed or observed. Thus one tourism business owner I'd spoken with had initially become a member of FLT, but

after a few years allowed his membership to lapse when he viewed it to be not making a significant impact towards his business performance (Businessperson in MAC Geopark, 2017b).

7.5.4 - Significance of national tourism policies

Although the policy incentives contributing towards the overarching aims of the Belfast agreement to forge collaborative projects across the Irish borderlands have been strong - with the projects MAC Geopark has been involved in typifying the effective interpretation of those policies - it is important to identify too, that the status and developmental positions within tourism have historically and continue to remain at different phases north and south of the border. Although gaps in development around the tourism industry within Northern Ireland have been improving notably since the initial IRA ceasefire in 1994 (Teague and Henderson, 2006) variances with the situation across the border continue to exist. These extend across performance - the Republic of Ireland attracts four times the number of tourist arrivals and has a hotel stock nearly eight times that of in Northern Ireland (Fáilte Ireland, 2017) - conduct and structure of the sector. With it being reported: 'Thus the stakeholder coalition that develops within a particular industry to advance its interests in the political and economic system appears stronger and more organized in the Republic than in the north' (Teague and Henderson, 2006).

The wider policy positions as reflected at national tourism policy level, have equally moved at different paces and in differing directions. In the Republic of Ireland, the sector progressed beyond product and infrastructural moves, to more

recently concentrate on the considerations of linking together services at a destination. Then to draw together additional narratives and stories around the natural landscapes, cultural heritage, food, archaeology and others in order to shape what the national tourism promotion agency described as the presentation of a tourism 'experience' (Fáilte Ireland, 2013). In contrast to this more coherent and centralised strategy, the tourism sector in Northern Ireland is placed within the context of the nascent Northern Ireland Assembly taking responsibility for certain aspects, whilst devolving others to the district councils. The further restructuring of council borders in 2015 and alterations to NI assembly departments (UK Government, 2017), left the tourism sector as an even more complex assemblage. For instance at an operational level the MAC Geopark within the new Fermanagh and Omagh council has now been placed under the Department for Arts, Culture and Leisure, whilst tourism management and tourism development have been located in separate departments (Marble Arch Caves interview, 2017b). When expressed in tangible terms such as through the issue of signage and the linkage across individual geosites around the geopark, the push for a reworked model of governance for MAC Geopark was seen as priority concern. In so doing the aspiration is to connect agencies involved in the geopark at both senior, higher political levels as well as the practical operational connections that have found easier progression. One outcome being the generation of an approach considered to be already implemented around the Giant's Causway UNESCO World Heritage Site, that of an integrated local and national plan to aid the development of the destination (Marble Arch Caves interview, 2017b).

7.6 - Partnerships, alliances and operating in an active network

Having emerged as both a longstanding geotourism attraction (show cave since 1985) and the first geopark to be established in the United Kingdom (since 2001), MAC Geopark differed from the other two case study sites in often being the focal point for partnership activities rather than having to reach out and secure connections more proactively across the geopark networks. That perspective was complemented in the knowledge that the geopark had a long running commitment from Fermanagh district council, alongside significant funding opportunities generated through its borderlands position and the major funding support through EU regional development programmes devised to back the implementation of the Belfast agreement (Marble Arch Caves interview, 2015). As a consequence of the regulations and guidelines around those EU programmes, and the attraction of them being effectively 100% funded (hence taking away the awkward task of securing co-financing), the majority of larger projects and activities have been conducted through Fermanagh district council as the eligible legal entity along with additional Irish partners organisations including neighbouring counties and national tourism agencies or the geological surveys from Northern Ireland and Republic of Ireland (Marble Arch Caves interview, 2017b).

From this position, MAC Geopark has been showcased as a demonstration case to a wide number of new and aspiring geopark management groups from Europe, Asia and North America. These opportunities occur either through MAC Geopark hosting guests, guiding them around the geopark and providing workshop and seminar exchanges, or through presentations by management staff from MAC Geopark at national and international geopark meetings or conferences. Having

witnessed and observed MAC Geopark staff in both of those situations, the emphasis that is projected is on how MAC Geopark seeks to recognize and adapt to the European Geoparks Network (EGN) charter and find a balance between its developmental, educational and conservational commitments whilst also playing an active role in the networking activities across the EGN (Marble Arch Caves interview, 2015). In so doing it projects what may be seen by the geopark management staff it is connecting with, as being an ideal for a geopark structure.

In more recent years, with a hiatus between the major EU programmes that centred on the Irish peace process, the MAC Geopark management team has accepted opportunities to participate as a less central partner in a number of other projects. These were described as being "a lot of work for not so much gain as we've had out of the past two INTERREG projects. But what it does is rekindle some of our contact with other geoparks and help us to establish contacts in geographical areas that we haven't been quite so embedded in, like Scandinavia" (Marble Arch Caves interview, 2017b). In reflecting upon the different networking and funding initiatives that MAC Geopark has been involved in, the management team identified at least two motivations behind these linkages. One was an acknowledgement of what was described as 'the ethic of connecting with other geoparks as well as local and regional stakeholder partners'. A second rationale for utilizing partnership projects, was to use the funds to bring some continuity through supporting, amplifying and expanding upon ongoing developments that had been started during previous project phases (Marble Arch Caves interview, 2016).

7.6.1 - Irish and UK geoparks network

As a consequence of its position as a trans-boundary geopark, MAC Geopark can participate in the Irish and UK geoparks forums. As a founding member in both of those groupings, I have observed how MAC Geopark staff have taken opportunities to attend and embed their perspective on how a geopark might operate in practice. The direction of the Geoparks Ireland Forum following its establishment in 2007, is outlined on the website hosted by the Geological Survey of Ireland (GSI) as being specifically 'to inform and guide stakeholders and provide networking opportunities' regarding the future development of geoparks on the island of Ireland (Geoparks Ireland Committee, 2017).

During the two Geoparks Ireland forum conferences I attended, the emphasis was indeed on sharing experiences and offering support for newcomers and aspiring sites. The platform was also one where agencies and representatives from heritage agencies, tourism promotion organisations, local authorities and higher education institutions were welcomed and actively participated. As the most prominent geopark in Ireland, MAC Geopark staff were observed to take a leading role in progressing this objective and have been ever present at all the meetings and conferences organized for the forum. In the lead up to formal recognition by UNESCO of the geoparks model and subsequently with the official recognition of that status in 2015, the national forums have also been utilised as a pathway to inform and embed relations with the UNESCO national commissions in Ireland and in the UK.

7.7 – Conclusions – growth, reflection, new challenges and transitions

Marble Arch caves have been a longstanding feature in the development strategy of one corner of the Irish borderlands, whilst additionally becoming an influential member of the geoparks networks. This case study chapter sought to assess the longevity and prominence of the geopark through a consideration of the methods of its growth, the nature and commitment expressed in its stakeholder associations, and the flexible manner of its management that has allowed its organization to simultaneously adopt a policy perspective that reaches outwards to its commitments as a UNESCO global geopark whilst also adapting to the changing political conditions locally.

Located in a territory influenced by diverse land ownership considerations, and a complex suite of post-conflict policy issues placed within a partnership covering different jurisdictional frameworks, this ethnographic fieldwork traced how the Marble Arch Caves Geopark management team interpreted and adapted to the changing conditions locally and across the geopark model and networks. One facet that emerged strongly was how the confidence of organizing a geotourism attraction effectively generated confidence and commitment from the local government in Fermanagh. Joining the geoparks network with this experience already in place, and with the guidance of a stable management consortium (the manager of the caves has now been in position for 32 years), MAC Geopark in turn had an influence on the direction in which the nascent geoparks model adapted its policy charter and developmental direction (Marble Arch Caves interview, 2017b). This sequence in timing meant that the geopark management team described a series of decisions where they took advantage of opportunities proactively rather

than being steered from a strategic plan based around a more finalized vision of the geoparks model.

In terms of the local consortium partnership, MAC Geopark equally used an opportunistic approach as it took advantage of the funding opportunities that emerged following the Belfast agreement of 1998. With tourism in particular one of the six cornerstones in implementing actions after the Belfast agreement (Teague and Henderson, 2006) the local councils around the Irish borderlands, including Fermanagh and Cavan which form the geopark management group, followed where significant programmes particularly from the near €3bn worth of EU programme finance were channeled (Colgan, 2015). The successful cycle of collaborative activities guided by the geopark management and facilitated through the EU programmes in turn ensured that the more senior political tiers of governance were content to take a step back from directly engaging with the geopark strategy or policy (Marble Arch Caves interview, 2017b). At the operational level a much more active partnership evolved between the staff in counties Fermanagh and Cavan, who were involved in implementing actions and making the geopark function in all its commitments (Marble Arch Caves interview, 2015). Such a gap between senior and junior responsibilities of governance, concurred with the conclusions made a decade earlier by members of a research unit whilst assessing the practical application of trans-boundary policy within the tourism sector across the island of Ireland following the Belfast agreement (Teague and Henderson, 2006).

The active and outward facing role played by the operational staff of the geopark, was observed to extend beyond quotidian local tasks as they viewed networking responsibilities not just as an important part of the geoparks ethos, but as a useful method to 'amplify and expand' previously initiated developments (Marble Arch Caves interview, 2017b). Networking in this case entailed partnering in other trans-national projects mostly funded through EU programmes, plus hosting and providing training support for existing new geoparks or aspiring territories from around the world. In so doing MAC Geopark acted to enhance its status and profile locally and across the geoparks networks. In finding such a balance, it also sought to 'spread its bets' and move beyond over dependence from policy and budgetary support in one direction, and allow opportunities to arise through additional partnerships (Marble Arch Caves interview, 2016).

This chapter has thus laid out the manner in which MAC Geopark both interprets and has influenced the geopark model in a dynamic borderlands and post-conflict arena. It can be noticed that the three case studies utilized in this thesis, when read together point to as many convergent perspectives of the model, as areas where they separate and demonstrate quite specific or individual perspectives as to how geopark policy can be enacted. But to make a more meaningful impact to the understanding of what challenges arise with the dissemination of geoparks across increasingly diverse landscapes and settings, it is essential to look more closely at what the thick data from the case studies has unearthed. In particular the comparison and analysis of the multiple geopark locations and modes of collaboration, can most effectively tease out threads and themes when contextualized and juxtaposed along with the theoretical stances that I believe

have a strong relevance to the actors, institutions and objects that converge around the geopark model. The following chapter therefore looks to first trace the practical similarities and separations in terms of how the geoparks are manifested on the ground and managed amongst their consortia. Then a thorough exploration is offered as to what the concepts of, a distinct philosophy of geology, the anthropology of policy, and the utilization of an Actor Network Theory approach, bring to an understanding of the influences and challenges that lie at the heart of the geoparks model when viewed through the information that I have extracted from the case study sites.

Chapter 8 - An analysis of theory and practice as a common weave in the development of geoparks

8.1 - Introduction

The studies of geoparks in the English Riviera, Katla and Marble Arch caves presented in the previous chapters, have shown in depth how the geopark model has come to be interpreted and practiced in different ways as its network of sites becomes recognised in wider locations and settings year on year. It has been essential to examine geoparks in this manner, as the background concept, philosophy and policy shaping the geopark documents and ethos cannot be separated from how they are realised in practice on the ground. This absence of a division between theory and empirical practice leads to the way that the discipline of science, technology and society (STS), integrates 'theory and method and empirical practice together with social institutions (and sometimes objects) and insists that they are all part of the same weave and cannot be teased apart' (Law, 2016). Across the geopark cases I have observed, interviewed and followed a broad range of actors. This has allowed me to move around a sequence of sites and locations where the policy of geoparks has been enacted, in order to consider not just how but through which processes those enactments may occur (Wedel and Feldman, 2005).

This chapter subsequently places those observations into the framework of theories that I introduced during chapter 2 of this thesis. The first part of the chapter analyses at which points the geopark sites can be compared, and also

where the 'patterns of relations in practices' (Law, 2016) demonstrate difference. In so doing I am seeking to establish some of the tactics and strategies used to proliferate the model. In the second half of the chapter, I provide a closer analysis as to how the geoparks model can be understood in greater depth through the linkage with elements drawn from a philosophy of geology, public policy as approached by anthropology, and in viewing policy using the stance, methods and tools assembled with actor network theory. I also consider how some of the strategies used to balance the central singular expression of the geoparks model and the diverse enactments out in the individual geopark locations, have aspects in common with modes of syncretism as comprehended from an anthropological perspective.

8.2 – We are all geoparkians: points of similarity and convergence in geopark enactment

Throughout public presentations of the geoparks model where I attended, moving from events such as the EGN and GGN conferences, to digital expressions online within geopark webpages and Facebook groups, an on-going effort is made to present a consistent view as to what a geopark may look like and how it is understood to operate most effectively. This is supported in documentary materials through repeated references back to the core geoparks charter and rules of operation (EGN, 2015b). The geopark model is also frequently referred to in terms of consolidating around a strong and clear geopark 'brand' (EGN, 2017b) and benefiting from the wider leverage of the UNESCO brand (UK National Commission for UNESCO, 2012; UK National Commission for UNESCO, 2017). But

is it possible in the observations made around the three case study geoparks, to see some of this commonality in practice? Are there points of consistency across different geopark sites and their respective interpretations of the rules and policy surrounding the model? Utilising the same headings of Management structure and consortium; Feature of geoparks manifested on the ground; and Policy interpretations, which I used to assist the description of the case study geoparks, the following section will analyse where certain points of convergence appear to be occurring, and the implications they have in framing a consistent vision of the geoparks model.

8.2.1 - Management structure and consortium

From its inception at the turn of the millennium, the geoparks model has continuously stressed that its development in each individual site emerges from what the geopark network describes as a bottom-up connection around local organisations (Martini, 2009; Halim et al., 2011; UNESCO, 2016c). Geopark initiatives as they strive to formulate a consortium and management partnership, have generally considered the most appropriate starting point to be around councils, municipalities or other related local governmental organisations. Depending on the scale of the landscape considered for the geopark boundary, a related number of municipalities are brought together. In the case study sites this tendency can be observed with the smallest English Riviera Geopark being organised within the single unitary council of Torbay. Marble Arch Caves Geopark since its expansion is twice the size of English Riviera, incorporates the twin agencies of Cavan county council, and Fermanagh and Omagh district council. Whilst by far the largest territory, that of Katla Geopark at nearly 10,000 km^2,

includes three large, but sparsely populated council areas. Other geoparks that I have visited such as Bergstrasse-Odenwald Geopark in central Germany, Geopark Harz-Braunschweiger Land-Ostfalen in northern Germany and Parco Nazionale del Cilento e Vallo di Diano in southern Italy, have had more complex management structures involving a greater number of different authorities. But in each of the case study locations, their coordination teams explained to me that it was a conscious move to keep their management grouping as streamlined as possible. It was mentioned by geopark staff in the English Riviera that, for instance, if their geopark had extended out to include some of the Dartmoor national park territory - which would have been coherent in terms of related geo-heritage and ensuring that a more extensive territory was bounded within the geopark - it would have mixed and complicated different management systems, areas of responsibility and policy focuses, that might have taken up too much effort to oversee (English Riviera interview, 2014).

The inclusion of council organisations is not obligatory under the guidelines of the geopark network, but is more a practical interpretation and response, since local government agencies in rural settings often stand alone in having the potential resources and capacity to be a seat for staff and other facilities. Additionally they are often the conduit and take responsibility for channelling and applying policy actions that are relevant to the geoparks operation (notably environmental or conservation concerns, leisure and heritage management). In thinking through which other groups may be involved in a bottom-up initiative, each of the geopark case study areas have established ad hoc relations with civil society agencies and private sector businesses, but these have not played a significant coordinating role

in the geopark partnerships at any of the sites. The only exception to this situation has been the proactive and central role played by the Kents Cavern visitor attraction in the English Riviera Geopark, which is a family run limited company with an associated charitable organisation, the Kents Cavern Foundation (Kents Cavern, 2017). With research, scientific and technical support around the earth sciences being required to fulfil a number of obligations as stipulated in the geopark's charter and guidelines, linkages to tertiary educational institutions are present at all of the case study sites. The function of these partners on the ground is to support scientific research in the geopark, assist in specialist walks or tours and to bring specialist knowledge for interpretation panels, documents, talks and training (Marble Arch Caves interview, 2015).

An additional feature that has also been shared across each of the geoparks, is that consortia and the range of partner institutions or the organisation within those institutions do not remain static. Through the engagement with local political agencies, each site is exposed to electoral cycles leading to new and different alliances, with changing perspectives on the policy or operational issues pertaining to the geopark. Changes occur in staff and department responsibilities, whilst entire organisations can fold or be created anew. In the English Riviera Geopark for instance, a change of elected mayor and associated party allegiance, meant that a new relationship and lobbying argument had to be formulated (English Riviera interview, 2011a). The position and structure of management for tourism promotion and coordination in Torbay has also altered and passed through several iterations, from a department within the unitary council to a public private partnership company (ERTC, 2016).

At Katla Geopark, again through fluid political shifts with two significant changes and the election of different prime ministers and central government coalitions, geopark partner organisations have folded and new agencies been created as alternative party policies are applied. For instance, an original member of the geopark partnership, the regional development office for South Iceland, DCSI, no longer exists. That development was explained by one of the management team as being due to, "much of its areas of responsibility being overtaken by the Association of Municipalities in the region, which in turn after a couple of years outsourced the services to a few university 'Knowledge Centres' including the university partner here in Katla Geopark" (Katla interview, 2016b).

Equally in Marble Arch Caves Geopark, a number of boundary changes, which have been described in detail within that case study chapter, meant its partnership grew. Once the expansion in 2008 pushed the geopark over an international boundary, this entailed a new collaboration between local government bodies operating under different jurisdictions. More recently changes occurred in local government boundaries across Northern Ireland, and the founding agency of the MAC Geopark altered to become Fermangh and Omagh district council (UK Government, 2017; Marble Arch Caves interview, 2017b). Explaining the current management situation one member of the MAC Geopark coordination team outlined that,

"some of our stakeholder organisations have changed fairly drastically, so its all in a state of flux. Then of course the whole situation that's on in Northern Ireland at

the moment with government effectively dissolved, it means you have to continuously fight your own corner" (Marble Arch Caves interview, 2017b).

Activities on the ground demand that geopark staff have to repeatedly present and convince on the value of the geopark idea to newly appointed or different governmental officials. The movement and updating of such an assemblage, is a reminder of how policy, in this case around the application of the geopark model in various local government settings, is not something that is simply transferred as a bounded object, a boxed preconceived strategy to be passed from location to location, across regime after regime (Shore et al., 2011). Instead, the movements, adjustments, or reconfigurations described for instance at MAC Geopark, present how even in an outwardly stable and constant expression of the geopark policy (as presented at public events like the EGN or GGN conferences), if the interpretation is examined more closely, it demonstrates a process that fluctuates and runs through phases of contestation and renegotiation.

8.2.2 - Features of the geoparks as manifested on the ground

Even within the three case study sites, the contrasts between rugged Icelandic volcanic terrains, verdant rolling Irish hills and lakes, and the bustling bay and headlands of the English Riviera, would seem to suggest that the ways in which a geopark interprets the model can only be individual and uniquely representing of their geopark territory. However, travelling around the geoparks searching to observe how they are manifested on the ground, brings into focus some of the demands expected from the network about the model as it is formulated through its mandate or charter. The practices of honing in upon the expressions of the

charter, combined with the exchanges and reminders continually taking place online across Facebook pages, or offline around the sessions or presentations at geopark network meetings and conferences, have served to produce a number of similarities in practice when individual geoparks transform those concepts into actions on the ground.

With narrative and 'earth stories' forming an essential aspect in the presentation and framing of geological knowledge (Frodeman, 2014), it comes as no surprise to find interpretation of such knowledge to wider publics, emerging at the core of each geopark landscape and geosite. The practices through which interpretation takes place, remain quite consistent across the various geopark localities. These can be broadly divided up between a mode of delivery coming through specialist guides presenting at talks, accompanied walks or tours (cf. English Riviera Tourism Compnay, 2016; Marble Arch Caves Geopark, 2017), and information presented via panels or digital applications. The form of language and information provided on panels has been a topic of discussion frequently opened up at the public EGN and GGN conferences. A rule of thumb commonly shared during presentations was that the scientific geological information should not be so technical that a primary school child could not follow the narrative. English Riviera, Katla and Marble Arch Caves Geoparks, broadly follow this guideline, as my observations at numerous roadside geosite panels have confirmed. This ensures that panels shared a common geopark look in terms of size, content and intrusion into the landscape they are communicating about.

Looking across the overall layout and materials common to each of the geoparks visited, an additional scattering of 'actants' - in the parlance of actor-network theorists (Haraway, 2004; Latour, 2005) - can also be recognised in the shape of maps, leaflets/brochures, museums, viewpoints, paths and walkways that are enacted as some of the starting points for activity in the geopark. I have outlined more detailed examples of these materials during the individual case study chapters. It is noticeable especially how they play a role in processes that are contributing to geological narratives, but also in supporting introductions and communication regarding the outdoors physical discovery of a local setting through forms of adventure and activity tourism, or routes to link into leisure, relaxation and wellbeing (English Riviera Geopark, 2016).

The style, arrangement and function of these common geopark features such as interpretation panels, visitor centres, maps and trails which represent soft and sometimes hard infrastructure (Slee et al., 1997) continue to be understood as some of the central components in the application of geopark policy. It is these items that occupy a considerable amount of thought for instance when funding opportunities arise through bilateral or multilateral projects (Marble Arch Cave interview, 2017). Whereas the geoparks charter and statutes are replete with terms including 'management', 'community', 'development', and 'training', the responses on the ground and in collaborative programmes have a tendency to place these further into the background when debating actions and exchanges. The practical focus for the transmission and popularising of the geoparks model instead accords with many of the distinct behaviours and narratives that the

geological community considers to define 'what is it like to be a geologist' (Raab and Frodeman, 2002).

At its heart visualising geology involves an engagement with the field and field visits or experiences are seen to hold a prominent role in the enactment of geoparks. These field walks, self or guided tours equally demand explanations and interpretation and are sometimes utilised to allow small groups access to geosites that are more remote or difficult to reach through restrictions in infrastructure, or are geosites where the earth story is less obvious and demands greater detail in the narrative. Examples abound across all of the case study geoparks as well as other geoparks I visited at the time of EGN and GGN conferences where there is always at least one day of field trip visits into the landscapes of the hosting geopark. But to aid the visualisation of this point, I would like to raise just one outstanding practical illustration that is situated in MAC Geopark. The trail between the Marble Arch Caves and Cuilcagh mountain links the two original core attractions of the geopark. The upper reaches of the mountain are also the habitat for internationally recognised blanket bog wetlands. As considerable visitation has already occurred in the area, in order to assist in the conservation of the bogs during an envisaged period of further growth and development, a wooden boardwalk was constructed in 2014 (Marble Arch Caves Geopark, 2017). The boardwalk allows movement between different lithologies and habitats, provides a platform for interpretation, and draws in a range of alternative users that include scientists, those on an educational visit and those out for leisure and relaxation. Passing comment on the multiple facets of the new feature in the geopark, one member of the MAC Geopark management team explained,

"With the boardwalk we put up in 2014 the visitor numbers have just exploded. Which is causing us problems, but its great for getting people out and enjoying the environment that they wouldn't have accessed before". (Marble Arch Caves interview, 2017a)

The presence of similar types of geopark materials and practices are certainly consistent in all of the geoparks I visited. In a form like the boardwalk on Cuilcagh mountain those materials most directly resonate with the statement, 'The Rock Connects Us'. This trope - that is heavy with 'clouds of connotations' (Law, 2016) emerged out of the specially commissioned GeoOpera titled Earth Echoes, which was performed at the opening ceremony of the 7th International Conference on UNESCO Global Geoparks (English Riviera Geopark, 2017a). It is one attempt at a particular moment in a performative style to gather together the ethos, philosophy, materials and sense of process that capture and celebrate how humans and the geology of a territory may be understood to converge in a geopark (English Riviera Geopark, 2017b). I shall come back to the significance of the process around the generation of the Earth Echoes opera and the evocation of its repeated mantra 'The Rock Connects Us' (English Riviera Geopark, 2017a), further on in this chapter where it relates to the philosophy of geology.

What remains in each of the geoparks observed is also the challenge to identify an appropriate balance when delivering their earth stories (Frodeman, 2014), between visibility and signage. In the former, the geopark teams are seeking to ensure visitors and residents alike know they are in a geopark (and what one is).

Whilst in terms of signage, the issue centres around a concern in not putting up too many signs so as to make the environment cluttered or aesthetically unappealing, or too few signs where the visitor misses a key narrative or has difficulty in reading the landscape (Marble Arch Caves interview, 2017b).

The significance of this seemingly cosmetic feature of the geopark model was raised by each of the coordination staff interviewed who expressed in their individual settings that they were not fully satisfied in their continuing campaign to being seen and recognised as a geopark by all visitors and residents alike. This was most forcefully presented from the coordination teams in English Riviera and MAC, who specifically compared their situations with those in nearby National Parks or UNESCO world heritage sites. Because those expressions of conservation and heritage grew out of central governmental decisions, they were able to weave together and configure particular local needs into national policies more readily. Furthermore, the perception conveyed to me, was that these forms of protected area, particularly the UNESCO world heritage sites, were perhaps more clearly understood or recognised by government officials, and consequently received greater and more direct support from the resources of central government (Marble Arch Caves Geopark, 2014). In contrast the grassroots emergence of the geoparks locations generated greater difficulties in coordinating or seeing policies applied in their settings. This was expressed most clearly by one member of the MAC management staff, who stated:

"You know it wouldn't cost government very much to say we'll have a similar signage policy for the geopark as for the Giant's Causeway and Causeway coast area". (Marble Arch Caves interview, 2017b)

This quote brings into focus the significance of policy critique and the impacts that alternative configurations or interpretations of policy have on features as simple as signage. Within the formal EGN and GGN conferences or training events, programmes continue to be dominated by an emphasis on delivering descriptive presentations and exchanges relating to the form or function of 'what goes on in a geopark'. Questions of signage, interpretation, design, and layout around geosites bring out many reports from across the geoparks network, but they stall on commentary or analysis of context - such as land ownership or access. Equally the bridging between individual geoparks through conceptual links, for instance in terms of what a 'bottom-up' initiative might entail, or what different bottom-up assemblages bring to varying geopark locales, remain less prominent. Having considered the form of methods that STS has utilised, I believe that the separations between thoughts of geopark policy and practice, would certainly benefit from working to move beyond what Latour (2004) describes as context-less matters of fact, to engaging with the type of relational matters of concern that I encountered in each geopark study.

8.2.3 - Policy interpretations

In a similar way to the manner in which the geoparks are manifested on the ground, with regards to the local policy setting and which areas of the geopark model are prioritised or emphasised more significantly, an initial consideration

may conclude that the backdrop formed around each geopark is distinct and entirely individual. However, as highlighted in the three case study chapters, there is a singular response by the coordinating staff from each locality in remaining strongly committed to meeting their obligations to attend all of the biannual European Geoparks Network meetings and the conference. That consistency is carried through in terms of deference and enthusiasm expressed in the public forums to the qualities of how a geopark should be considered, as laid out and defined through the centralising documentation, rules and guidelines of their collective geoparks organisation the GGN which since 2014 has been operating as a not for profit non-governmental organisation (EGN, 2017b). The case studies have demonstrated that there is a fine balancing act required if each geopark is to achieve the full gambit of obligations and commitments that are outlined in the geoparks charter and rules of operation (EGN, 2015). One significant area of challenge lies in the formulating of a sufficiently flexible mode of governance that can adapt for changing circumstances. With the tendency in the revalidation analysis to review mainly using quantitative indicators, issues of governance and power tend not to be brought into focus as they are poorly analysed through numeric indicators, but instead often become 'rendered invisible or unsayable' by that auditing process (Shore and Wright, 2015b). It is possible to outline how 'the rock connects us' inside and across geoparks, but difficult to demonstrate connections and practices through numbers.

The EGN meetings are one expression of the geoparks policy relating to the ethos of continuous exchanges and networking with partner geopark sites. Another is through the formation and application of project partnerships made up of clusters

of geopark partners. These are often self-selecting according to the eligibility rules and guidelines of the specific funding programmes. This component of the geoparks 'ethic', as it was described by one colleague in MAC Geopark (Marble Arch Caves interview, 2017b), is an area where the case study sites have demonstrated a common commitment. In part this may be attributed to an overarching reliance on support via public funding channels experienced across all geopark consortia. In addition though, fulfilling a suite of networking activities is one of the aspects through which the geopark is assessed during the re-evaluation process (EGN, 2015b). I consider the self-monitoring demands and coherence or inevitability demonstrated around the extensive revalidation process that takes place at each geopark every four years, to be an example through some of its traits, of an audit culture (Strathern, 2000; Shore and Wright, 2015b). This relationship will be considered again in more detail later in the chapter where I will be looking at the ways that geoparks may be viewed through the lens of anthropology of policy.

A further point where the case studies converged was during the phase most actively practiced between 2010 and 2015 when the policy focus of the geoparks organisation was centred firmly on connecting and lobbying for the model to become part of a formal programme inside UNESCO. One of the core tasks in that period was for the coordination teams in the individual geoparks to build closer linkages with their respective UNESCO national commissions, because of the role of those state agencies within the inter-governmental operation of UNESCO (UNESCO, 2009; Bertacchini et al., 2016). In particular they were required to raise awareness and familiarity in the national commission offices as to how the

geopark model operates and differs from other UNESCO programmes, as this had not previously been a prominent activity in the quotidian running of a geopark (English Riviera interview, 2014). Additionally a number of meetings and events were organised in the headquarters of UNESCO in Paris. On these occasions the emphasis was on showcasing the activities of the geoparks individually and as a network for the benefit of invited UNESCO delegations and officials (UNESCO interview, 2014). I had the opportunity through a variety of communications with individual geopark staff, and also collectively on the public stage particularly of the 2014 GGN conference in Canada, to observe how the geoparks teams pooled together in practice around these commitments. A palpable sense of common mission was visible as the mutual benefits from securing a full UNESCO status for the geopark model were repeated and refined on the occasion of every scheduled geopark meeting or event (English Riviera interview, 2014; Marble Arch Caves interview, 2015). This joint action was encouraged and fuelled further through reporting back from the geoparks advisory committee members, on the progress of their efforts as the proposal passed through the bureaucratic maze of committees, resolutions, executive boards and general assemblies within UNESCO (UNESCO interview, 2014; UNESCO, 2014). Once more on the public stage, a unified voice was presented from the position of the geopark network members, with the rationale of this component of the geoparks policy now treated as an 'unproblematic given' (Wedel et al., 2005).

Returning to reflect upon the policy assemblages engaged with inside the individual geopark locations, one further commonality that was especially identified by the coordination staff in the English Riviera Geopark (English Riviera

interview, 2011a) were the efforts to tackle the instabilities and inconsistencies in policy application (Schwegler, 2008) over the geopark territory. The shared motivation was to deliver involvement and ensure benefits distributed as equally across the geopark as possible. However in each geopark the field visits identified visitor attractions, particular villages or towns, or landscape features that generated greater visitation or focus of activities provided an uneven sequence with the development of what one entrepreneur in MAC Geopark described as 'hot spots and not spots' (Businessperson in MAC Geopark, 2017a).

One further corner of activity across the geoparks that is mandatory and resulted in similar responses as viewed in the case study areas was over the period of revalidation that occurs for each member geopark every four years (EGN, 2015b). The revalidation process involves two main steps which are presented in detail during the introductory chapter of this thesis. But as an aide memoire, the first is a phase of self-reflection organised around the series of questions posed in a 'self-evaluation' document (EGN, 2017a). Then after a four day revalidation mission conducted by two experienced staff from two different geopark member locations, a mission report is written up in a second 'progress evaluation' document (EGN, 2017a). Speaking to the different geopark coordination staff concerning periods of revalidation drew out similar responses in the different locations. They were outlined as a process that acted to focus minds and stimulate the most intensive periods of activity by creating opportunities to press forwards to achieve actions which had been held up when there was not the emphasis of a hard deadline and an evaluation 'with the teeth' of presenting a yellow card putting the whole geopark on alert that it had to improve its performance (English Riviera interview,

2011b). One member of the English Riviera Geopark staff explained that completing the self-evaluation documents:

"certainly highlighted to me areas that we were not so strong on, and things that I had to do something about. Absolutely focused my mind and because that was the priority I could concentrate on it". (English Riviera interview, 2011b)

8.3 - Points of difference and multiplicity

In the previous section, we have seen how the policy moving to generate geoparks has sought to gather together and unify the practices around a fluid assemblage of human and nonhuman actants(Shore and Wright, 2011). Looking through those studies however, it is possible to view that simultaneously there is a whole different collection of approaches to the interpretation of what a geopark may appear as in practice. Once more following the headings used to frame the case study descriptions, this section shall open out some of the manifold strategies and interactions employed to make a geopark come into being in a complex range of 'multiplicities' (Law, 2016). My observations around the case study sites also bring to attention how the policy of the geopark model as enacted on the ground, comes into contact with a great many more policy practices that form a wider 'hinterland' (Mellaard and van Meijl, 2016).

8.3.1 - Management structure and consortium

The interpretation of the geopark policy in each site has been devised through their own specifically chosen consortia of agencies. Those selections have come

about from the identification of a clustering of geological and environmental features with a diverse but consistent series of geological narratives presenting a thread or theme such as coastal, karst, volcanic, or a particular geological era or paleontological environment. Sometimes the choice of the geoheritage and the associated geo-stories through which interpretation of the outcrops and landforms is conveyed by geologists as 'poet semioticians' (Frodeman, 2003), comes first. In other geoparks the eventual choice is only configured after a reflection on the political boundaries, for instance where do council borders run in relation to landscapes and the reach of the geological narratives. Additionally there is the interplay of the policy hinterlands drawn from local and national agencies involved in educational, tourism and conservation concerns. Those interactions are mapped out in the individual case study chapters. The eventual grouping of stakeholder agencies, and scale of the geopark territory, can come about through many different combinations. In Katla Geopark, their partnership has brought about the closest connection with tertiary education, and this, for instance has facilitated their involvement in projects through the EU Erasmus+ educational programme. Whilst the consortia devised in MAC Geopark and English Riviera Geopark are more closely organised by their local councils. This has ensured that opportunities have been taken to directly employ council staff in the everyday activities of the geopark. However, different strengths then emerge, for instance in MAC Geopark there is the most direct linkage to the national geological surveys, whilst in English Riviera Geopark there is a more immediate association with local tourism agencies and stakeholders. It is important to emphasize again that these variations occur not only between the different geoparks, but also since the combination of

agencies initially arrived upon are not set in concrete or remain constant, new assemblages arise in response to a range of different circumstances.

Another way in which differences can be observed across the geopark cases studied here is in how they have responded at quite different moments to the model. In the MAC Geopark, the core of the policy was already established in the form of Fermanagh district council developing a geotourism attraction around the show caves in Marble Arch for some 15 years before the opportunity arose to attach geopark status around that practice. At the English Riviera Geopark, the engagement with geopark policy was devised around an intersection where Torbay council was managing natural heritage assets on its territory and promoting tourism, and sought to revitalise that clustering. In the Katla Geopark, the starting point came from a looser more aspirational assemblage of actors that hadn't coalesced previously, and notably were operating in a region where tourism had only become a prominent sector in the past decade, with a consequent lack of familiarity in how tourism policies may be enacted locally (Jóhannesson, 2016). In part because of the different tiers of governance in Iceland, the three local government partners were also unable to call upon the variety of resources and direct funding opportunities that were and are available to the councils involved in the geopark partnerships around MAC and English Riviera Geoparks. This, in turn, had an influence on the platform from which a functioning management plan could be devised in Katla Geopark (Katla interview, 2015b).

Although all of the case sites occupy a territory recognised by UNESCO as a global geopark, and respond to the requirements and obligations of the rules from that

network, each has also demonstrated how the intricate array of junctures that are enacted through the geopark actors and actants means that the object that is the geopark can be understood as existing as a range expressions which are 'more than one but less than many' (Mol, 2002). In MAC Geopark for instance, the linkages encompassed there have ensured that it has:

"recently been described as the nearest thing to national parks that exists in Northern Ireland. Not just through the combination of conservation, leisure and tourism and its planning or strategizing, but because the geoparks here are responsible for the practical side of things such as looking after facilities managed by the geopark. So if a tractor hits a sign it is the geopark staff that have to fix it". (Marble Arch Caves interview, 2017b)

Contrary to this, in Torbay, the English Riviera Geopark is understood in a number of ways, particularly through recognition of the organisational agency the geopark partners consortium created, the English Riviera Geopark Organisation (ERGO) and its decision making body, the Geopark Management Group. Through drawing together interests cutting across tourism, conservation, health and wellbeing, the geopark forms an umbrella feature which has allowed exchanges and understanding across a broader gathering than had existed previously (English Riviera interview, 2011a). Finally in Katla, the affirmation of its geopark status almost caught their consortium by surprise. As a consequence, new associations and interactions between actors had to be formulated around a looser plan and interpretation of practical roles in the operation of the geopark. Those emerging relations were also stymied by uncertainty in governance at the national level in

Iceland, and a lack of clarity as to what Katla Geopark meant to its residents and what roles its agencies were enacting (Katla interview, 2015b). Amongst the other EGN members though, Katla Geopark has been viewed as an active networking partner connecting into a number of collaborative projects (Katla interview, 2015a). Katla Geopark as enacted through those projects, draws together through different assemblages of actors and is produced through alternative processes (Mellaard and van Meijl, 2016).

8.3.2 - Features of the geopark as manifested on the ground

As a geopark can reflect any significant geological heritage, 'in terms of their scientific quality, rarity, aesthetic appeal or educational value' (EGN, 2015b), there is considerable scope for diversity in the combination of landscapes that are highlighted in any particular location. But the case study sites have also shown there is a spectrum in terms of the clarity with which certain landscapes can be seen by a lay public, and the degrees of interpretation or presentation that are required. The most dramatic and stark geopark setting lies amongst the active volcanic terrains of Katla in the south of Iceland. The geology here is literally on the surface, exposed and demanding a response. One direction that those connections have subsequently moved towards is in presenting a greater understanding of earthquakes, volcanic eruptions and jökulhlaup (flash flood of rapidly melted glacial ice). Such practices of geohazard awareness are relayed through alternative assemblages across scientific agencies, civil authorities, volunteer communities and IT or mobile application designers.

Located in an urban and considerably more built up landscape, the features and materials of the English Riviera Geopark, by contrast require more introduction and narrative interpretation to allow the geology to come into fuller focus for the resident or visitor alike. The outcrops and geosites of the MAC Geopark, lie somewhere in between the other two case studies. Mountain, caves and lakes are prominent features of the geopark, but these are juxtaposed amongst farmland and forests that can hide away some of the geoheritage. One of the less obvious responses to such geology is through the establishment of visitor centres and facilities around visitor attractions. This manifestation contributes to the overall visibility of the geopark model within the territory. Along with other infrastructure developments channelled through geopark projects, this has made MAC Geopark the most visible in terms of geopark materials.

8.3.3 - Policy interpretations

Alongside the diverse physical scenes that are seen to play host to a geopark, my ethnographic research around the case study locations, has brought to the fore how they function as the platforms not just for interpretations of the policy that is framing the geopark model, but also for a swirling mélange of policies that contextualise each geopark case. The management plan is one of the significant materials that works to define the context when each geopark is initially launched. At that point it is presented as having the feel of a 'unified concrete thing' (Mellaard and van Meijl, 2016) or as we are talking in geological settings, perhaps it is more appropriate to consider the policy being cast in granite.

That target of solidity was most carefully crafted amongst the case studies in the English Riviera Geopark. Its thoroughly researched and considered 48 page management plan, outlined an unpackaged, 'taken-for-granted' (Law and Singleton, 2014) description of the geopark model as it is presented by the European Geoparks Network website (EGN, 2011). The geopark management team then contextualised their plan by looking at the wider challenges, policy documents and directions set out in the Torbay area, with a particular reference to the local geoheritage and conservation issues. In turn the document then sets out priorities and plans around the managing and governance of the geopark as a whole, identifying how education, tourism and conservation considerations would be addressed. The complex interaction of agencies is visualised within in a diagrammatic web and looking to the future all of this is set out in an action plan of activities (English Riviera Geopark Organisation, 2007). The unrevised plan can still be viewed ten years after its launch, indicating to the reader how for this geopark, 'an over-riding principle is that we achieve regeneration in a sustainable way' (English Riviera Geopark Organisation, 2007). However, opening up the management plan and the geopark model in practice during my field study observations begins to show them up not as single blocks of granite, but more akin to fluid objects enacted in different ways through multiple patterns of relations (Law, 2016).

The other two case study geoparks did not place such an emphasis on devising a tangible management plan document, but instead guided their interpretations of how a geopark can function in practice through opportunistic interactions within their shifting terrain of policies. At MAC Geopark, the management partnership

based this on a continuing approach to build upon a stage, initiated around the show caves. That attracted development in a previously neglected corner of the country (Fermanagh District Council, 2008). Then especially once that partnership extended to become trans-boundary, it sought to provide an outlet in practice to materialise the tourism 'area of cooperation' to the Belfast peace agreement (Teague and Henderson, 2006) within a sensitive borderlands region. The chapter focusing on the field research data again points to enactment of these policies in practice, being far from docile uncontested objects (Shore et al., 2011). Over in Katla Geopark, the management and focus on policies in their policy hinterland did not have the mature assemblage as seen in English Riviera Geopark or MAC Geopark from which to expand or extend. More in response to the prominent changes to tourism as a tool for development across Iceland (Jóhannesson et al., 2010) the opportunities that may benefit the progress of the geopark, arose during a messy and uncertain period in political and social terms (Huijbens, 2014).

8.3.4 - Forms of geopark networking and association

As outlined earlier in this chapter, the obligations to network as stipulated in the geoparks charter, guidelines and as an item being judged in the revalidation process, are responded to in each geopark location. With regards to the commitment to attend formal EGN meetings and conferences, the agenda and timings are presented as an uncontested responsibility to the individual geoparks through the coordination committee. However, the experience and confidence in how to respond more proactively to networking opportunities beyond the formal EGN/GGN forums is not a 'self-evident' process (Shore et al., 2011), but varies significantly across each individual geopark and at different times within those

geoparks. Supported by the interview and materials gathered from the case study geoparks, it is apparent that the pursuing of collaborative project funding is not an automatic response but dependent on how resources are availed from the internal geopark partnership and where and when new partnership assemblages may arise out of the policy hinterland to the geopark. In the case of the English Riviera Geopark, the geopark management was the most embedded in terms of the actors and interactions as assembled around policies stemming from the immediate geopark partnership agencies. The relative stability and continuity of those assemblages, aligned with less experience at connecting with alternative inter-governmental funding pathways, meant that English Riviera Geopark participated in fewer external networking and collaboration projects.

In the situation experienced at Katla Geopark, the immediate municipal partners however, had limited means to contribute directly to the geopark activities. After a short lived chance to form a 'meshwork' through which to interact and associate (Law and Singleton, 2014) with EU pre-accession materials, an alternative set of connections from more temporally enduring connections with Nordic and North Atlantic partners was set into practice (Katla interview, 2015b). These linkages allowed for a raft of project collaborations which proved essential until the circumstance of Katla Geopark receiving a yellow card revalidation warning aligned with the timing when the geoparks model became formally accepted as a programme within UNESCO, once again altered the materials and interactions that might be practiced in the territory itself.

Within the consortium around MAC Geopark, the immediate council partners of Fermanagh district council and Cavan county council were in an overall position to provide more direct backing, although that situation is not a constant as reminded by the summarising comment made by one MAC Geopark staff member, that "you always have to fight your own corner" (Marble Arch Caves interview, 2017b). But in turn the assemblages in motion around the council authorities, and choices arrived at, flowed from complex interactions with EU programmes tied to the peace accords (Bush and Houston, 2011) which then interacted with the policy assemblages established by the geopark management. Additional project opportunities also emerged from the visibility and prominence MAC Geopark had within the EGN and GGN networks. The more opportunistic arrangement of such partnerships, were in part possible through the absence of a more rigid adherence to a management plan (Marble Arch Caves interview, 2017b).

8.4 - What the case studies add to the troika of theoretical framework interests

Initially presented in chapter 2, this ethnography of the geoparks model and networks, gathers together three interconnected philosophical and conceptual meshes. Now that the three case study geopark sites have been described in some depth, it is appropriate at this point to reflect further and reiterate why the triad of a philosophy of geology, the anthropology of public policy, and an analysis of policy through the lens of STS and actor network theory provide an appropriate basis through which to extend our understanding of how the geoparks model is being utilised and interpreted. In the previous section of this chapter it has already been

considered how the observations drawn from around the three case study geopark sites, chart areas of convergence and difference when the geopark model is being interpreted. But how do the methods in which the geoparks are realised on the ground, contribute and expand our understanding and contextualisation of the conceptual framework? To address that question I shall briefly summarise each of the three theoretical concepts and bridge analysis of the data that the ethnographic fieldwork has unearthed.

8.4.1 - Geo-philosophy as enacted in geoparks

Throughout my examination of the case study geopark sites, as manifested inside their physical geopark territory and beyond when practiced at geopark network events and activities outside of its managed boundaries, I did not come across any situations where a philosophical presentation of geological sciences was explicitly referred to or addressed by any staff from the individual geoparks. I have witnessed discrete and cautious philosophical positioning of the geopark model on several occasions, as postulated by keynote speakers during the EGN and GGN conferences. However, those stimuli were slow to be picked up upon in further public debate and only written up in brief (Martini, 2009; Martini et al., 2013). However, the methods, techniques and expressions of geology when considered as a hermeneutic and historical science, were observed and continuously practiced in multiple ways all around the geopark locations. These emerged most prominently through the expression by which interpretation was applied to assist in guiding the lay-person around the geopark landscapes, its layers, features and earth stories.

The process of understanding as back and forth movement, zooming in and zooming out and reasoning through a hermeneutic cycle, were recognisable in a great array of sites I visited. Moving between the whole and the parts of a geosite - for instance in a guided tour of Kents Cavern in the English Riviera Geopark - involves a combination of seeing say a small fragment of prehistoric human jawbone, then considering this in the context of the explanation as to how the caves were progressively formed, occupied, preserved, rediscovered, charted, researched and visited again by tourists and more researchers. The tour incorporates a passing acknowledgment to the majority of geology's central pre-conceptions, including the 'ceaseless motion' of plate tectonics (Gould, 1987: 68), the contextualising of climate change, and the ubiquitous reference to the concept of geological or 'deep time' (McPhee, 1981). The drip, drip of stalactites and stalagmites growing imperceptibly (our tour guide says at a similar rate to our fingernails), providing the ready-made speleological example of a concept 'so alien we can really only comprehend it as metaphor' (Gould, 1987). The challenges of presenting geological knowledge in a manner that the audiences in a geopark might simultaneously comprehend and be stimulated by, was another cyclical and never fully resolved trope or motif conveyed by the geoparkians I heard and spoke with.

The pre-having practices of field geology (its tool kit of geological hammer, compass, note or sketch book, hard hat, small plastic vessel of dilute hydrochloric acid, and hand lens (Frodeman, 2003), were rarely seen at the interfaces in the geopark where I was present. However, a few repeated items used for the practice of transmitting or interpreting geological knowledge in the theatre of the geoparks

could be noted. Maps, information panels, viewpoints, carefully curated visitor centres, routes and signage, were present not just in the case sites but across all the geoparks I visited. These may be considered to be a form of geopark pre-having - the implements through which we study and are guided through a geopark.

Figure 25 - Viewpoints and information panels, a common point of similarity in geoparks - Stonehammer Geopark, Canada (left), MAC Geopark, Ireland (right) (Jonathan Karkut, September 2014)

The most prominent characteristic of geological reasoning as practiced in the geoparks is undoubtedly the use of narratives that appear in every geosite or visitor centre across the network. These are practiced as earth stories and chronicles, that a geopark delivers using an array of written, graphic, visual, embodied or performed (in the case of the Earth Echoes GeoOpera) methods in an effort to draw together explanations, facts, or incidents. In so doing, helping us understand, experience and be inspired by the geological processes and landscapes, past or present (Frodeman, 2014). Examples are replete around the case study sites, but the most apposite in the context of how this thesis became constructed, was presented at the foot of Eyjafjallajökull volcano in Katla Geopark. It was after all the eruption of this volcano in 2010 that prompted my forced overstay in Langkawi after the GGN conference. Through the relationships initially

forged on that occasion, I was able to make a more informed selection of case study locations, and to accelerate my recognition amongst the geoparkians.

Visiting Katla Geopark in 2014 for the first time, I listened to and experienced the tale that connects Eyjafjallajökull, Þorvaldseyri farm at the base of the volcano, a former farm building now visitor attraction called 'Eyjafjallajökull Erupts', Guðný Valberg the farmers wife and manager of the attraction, Katla Geopark staff, along with information concerning geohazards, plus many other actors and actants. A fuller description of this gathering is presented in chapter 6. But here it is useful to apply this particular example to consider the role narratives play in bringing events alive, working to make geology more accessible and contributing to present the geoparks concept. The story as told by Guðný, alongside other residents and by means of the materials gathered at the Eyjafjallajökull Erupts centre, presents a compelling moment:

'where human and geologic time intersect. Earthquake, floods, hurricanes, and droughts [and certainly volcanoes] are places where deep time erupts into our more familiar temporal rhythms'. (Frodeman, 2003: 125)

The presentation of how and why the volcano erupted, or when it or its near neighbours Hekla and Katla may do so again, is also 'a part of, and contributes to, a larger narrative' (Frodeman, 2014). The larger perspective in this circumstance connects the 2010 eruption with the wider concepts of plate tectonics, and the suite of geological hazards that arise from a tectonically dynamic region. The narrative here is at once both an immediate human tale and at the same moment a

complex geological explanation. For Guðný Valberg, her journey and experience of the eruption took her across that divide. After initially coping with the fine grey ash that rained down on the farm and ensured that all everyday agricultural routines came to a standstill. She then transitioned into offering explanations to journalists then tourists as to what it was like living through and adapting to a messy eruption (Valberg, 2014). Observing the fascination and curiosity of life under a volcano, Guðný's role adapted again when she and her family transformed a formerly neglected farm building into becoming a successful visitor attraction. To aid that step and help present scientific facts to parameterize the eruption, she invited in new connections via academia and the public agencies managing Iceland's responses to geological and meteorological hazards. These sat comfortably alongside the films and photographs taken by her family, along with those from the Icelandic press corps (Valberg, 2014).

Together the narrative devised an earth story that informed how the experience of Guðný was one in a similar cycle of experiences faced by Icelanders since first settling over a millennium ago. Unlike during earlier eruptions, a broader narrative of geological explanations could now be inserted and additionally fit into the objectives of Katla Geopark. The geopark's targets for popularising and utilising geological heritage to assist sustainable forms of tourism, as well as disseminating lifelong education around the subject, connected well with this particular narrative. The action of using the story also to project into the future and attempt to prepare residents and visitors alike for further geohazards, following inevitable additional eruptions, provides the narrative with 'its inherent moral structure' (Frodeman, 2003). This moral vision fits in with one of the few moments conveyed

in the academic literature, that a philosophical stance has been presented in reference to the geoparks model. When asserting one role to specifically distinguish geopark territories from other UNESCO programmes, an opportunity arises by presenting various forms of what he calls a 'time window' (Martini et al., 2013). That is the position geology generally and geoparks specifically through interpretation and narratives, can offer to teach about the concept of geological time, as a continuum flowing between past and present, but 'in an attempt of a better comprehension and thoughts of a "today", needs to be completed necessarily by a vision of a future' (Martini et al., 2013).

8.4.2 - Geo-philosophical insights around the geoparks model

When viewing some of the central methods and techniques as applied across geoparks to convey interpretations and deliver connective earth stories, it became apparent that these have been crafted in the forge of geological reasoning as perceived through a continental philosophical stance. The examples taken from the three case study geoparks outline that those methods serve well to present explanations and offer a reading into locations and landscapes. However, the recognition of geology as a distinct science and the contribution of a hermeneutic and historical nature of reasoning, has long occupied 'a marginal place within the philosophy of science' (Frodeman, 2014). Consequently, even though geoparks form an ideal platform to present a continental philosophical perspective of geology, as academic and professional training continues to mark geology in a subsidiary position, geological knowledge remains predominantly framed around a reductionist mode of thinking. The background to this positioning was remarkably set over two hundred years ago as one of geology's most prominent

early thinkers, James Hutton, grappled with the discovery of deep time and how to place it within a broader set of geological principles (Frodeman, 1995). The neglected philosophical role of geology it is argued came about as following the existing tradition of hierarchy amongst the sciences, with hard 'experiment' sciences granted higher status than other soft and 'descriptive' sciences:

'Geology resides in the middle of this false continuum, and has often tried to win prestige by aping the procedures of sciences with higher status, and ignoring its own distinctive data of history. This problem, born of low self-esteem, continues to our day'. (Gould, 1987: 97)

I recognise this deferential positioning of geology in a number of contexts around the geoparks model, but it is most clearly outlined in the almost apologetic sounding expression repeated across a range of promotional materials that 'geoparks are not just about geology or rocks' (cf. EGN, 2017; English Riviera Tourism Company, 2016; UNESCO, 2016). But it hasn't only been an internal process from within the geological community with its continuing practice of a 'reverential reference' (Massey, 1999) whereby physics alone is treated as the paradigm of reasoning (Frodeman, 2014). A frustration at the lack of acknowledgement and response by public authorities to heritage and conservation as it related to the earth sciences, was expressed initially by the nascent geoparks network in the following terms:

'Today it is plain to see that our geological heritage needs protecting. But having said this, it is also clear that our governments with their economic and social

priorities are not inclined to finance strong policies of patrimonial protection - not yesterday, not today and probably not tomorrow. And this is particularly true for geological heritage'. (Martini, 2000: 155)

This perceived neglect also appears to confirm Gould's (1987) identifying of geology's lack of confidence as set against other sciences, and why geologists felt they had to make an initial call for more 'bottom-up' responses and take matters into their own hands to formalize and expand the geoparks approach around Europe.

Thus we find a less than coherent context for the application of a philosophy of geology as it is enacted within geopark localities. The processes of geological interpretation, the reading of landscapes and drawing in of new audiences to peer into Martini's (2009) 'time windows', all bear the hallmarks of a distinct historical science eager to encourage the wider world to share their fascination and passion for all things geological. But it is important to recall at this point that although geology is at the core of the foundational concept of geoparks, by way of its evolution to incorporate other aspects of tourism, archaeology, multiple expressions of natural and cultural heritage, territorial policy management (Martini, 2000), and an increasing necessity to understand issues of politics and governance, there is a considerable strain to contend with all those requirements. This was considered in MAC Geopark by one staff member who outlined the frustrations that can sometimes arise when juggling such a sweep of demands:

“People don’t always get the global geopark idea. Its not the easiest concept to explain. I think it's a very good concept and it has a lot going for it, but it’s not something you can explain in 5 minutes”. (Marble Arch Caves interview, 2017b)

Nonetheless, as the geoparks model stands today the input and influence of advisory committee members with an earth sciences background continue to dominate the framing of the geopark charter and rule books. The charter and guidelines are described as being ‘the geoparks philosophy’ (Madonie geopark, 2004). They are continuously debated and regulated on the occasion of advisory and coordination committee meetings (English Riviera interview, 2011b) yet the broadly consistent course concluded for those documents over the past decade and a half, does not show up much presentation or influence from the forms of geological reasoning as argued by Frodeman (1995, 2003, 2014) and recognised especially in many of the methods geoparks practice (as described above) when conducting geological interpretation on the ground. Instead the formation of definitions, directives, obligations - ‘Every territory wishing to submit candidature to become a European Geopark is obligated to accept this charter and will sign it at the moment of the official nomination’ (Frey et al., 2001a) - and regulations, has more than a vestige of the objective and empirical anchor of an analytic reductionism to which geologists still find themselves tied. As practiced in the geoparks model, this is most prominently visible in the conducting of validation and revalidation self-evaluation and missions. The method for this is based around the academic peer review process for research, although in this case the reviewing is not blind since the evaluation team are hosted and guided around the respective geoparks by the local geopark coordination team (UNESCO and IUGS, 2016). In

building to adhere around a singular and consistent vision of the model, efforts have become framed largely around a quantitative accumulation of scores, drawn out of the responses to six sheets and headings of questions (EGN, 2017a).

The observations, particularly those drawn from inside the three case study geoparks, highlight that although setting out a convincing case for understanding geology as an interpretive and historical science with a potential to bridge 'the neglected kinship between reasoning in the sciences and the humanities' (Frodeman, 2014), a philosophy of geology is more troublesome to enact in the field. Instead of being able to pluck out the most convenient and easy to hand tools from their 'intellectual toolbox' (ibid), the setting of the geoparks model and practice demonstrates a more complex array of associations that emerge when geological thinking directly addresses issues such as policy or development concerns that are more familiarly dealt with in the humanities. As a consequence, the geoparks model and practice now finds itself still searching to conceive a philosophical stance for an enhanced consideration of geology reflecting its more appropriate description as 'a synthetic science' (Frodeman, 2003), rather than a sidelined derivative science struggling to move beyond the familiar disciplinary silos it periodically finds itself restricted in. This position is summarised when Martini (2009: 87) considers the reality of geology in the world today and asks 'is it only a branch of science? Is its role limited to describing environments of the past?' His conclusion, like that of Frodeman (2003), is that geology pushes us to wake up to the significance of deep time instead of being limited by anthropocentric perspectives of time. Hence, he writes that:

‘Geoparks true conceptual originality is thus not in geology: they offer not only a reflection on time, but also challenge us to undertake an initial voyage through that enigmatic dimension. Geoparks, not just territories to teach geology, can become an experimental domain where the perspectives of the philosopher, the writer and the artist can be integrated. Thus, rather than a ‘scientific’ or ‘nature’ territory, they emerge as ‘cultural’ territories of far wider importance’. (Martini, 2009: 87)

That awakening to geological time also brings a completely different focus to the most profound challenges of this era, especially if ‘this era’ is indeed the Anthropocene (Waters et al., 2016; Clark, 2014; Latour, 2014). The work of the geoparks then stretches beyond a marginal exercise to bring in a few additional special interest geotourists, or to allow one more classroom grasp the influence of plate tectonics in making the jigsaw of our world map change a little bit every generation. Instead geoparks become one rather interesting location to consider the associations reconnecting of sciences and domains, that Latour (2007) calls our ‘earthly sciences’.

But for now, the geologists and geoparkians as viewed in the case study areas, have not yet found a suitable holistic or hybrid practice or returned to the polymath roots of geology (Gould, 1987) during its first period of emergence at the start of the 19th Century. Rather, in essence, a philosophy of geology as viewed in the geoparks, is straining to be released and practiced in the geoparks. However the legacy, in a sense of the heritage of geology as a science, ensures that efforts such as the delivery of the geoparks model remain to a large extent weighed down or

held in check by geology's past exchanges with philosophical concerns (Gould, 1987; Raab and Frodeman, 2002; Frodeman, 2003)

8.5 – Placing geoparks under the gaze of an anthropology of public policy

The second theoretical thread running through this thesis is drawn from an application of the anthropology of public policy. The geoparks model and networks grew out of the challenges faced by those concerned to bring a wider acknowledgement and valorisation of geological heritage. Rather than continuing to formulate more compelling scientific or philosophical arguments for the necessity to protect this aspect of patrimony, Martini (2000) outlined that the practical decision made at his place of work in the Haute-Provence Geological Reserve, was to primarily present the economic value and benefits of this heritage, in particular as channelled through geological tourism (cf. Hose, 1996; Dowling and Newsome, 2010; Martini et al., 2012).

Martini (2000) indicates that such a move brought together interactions around local economic interests, regional concerns of rural depopulation, and in the primary consideration or starting point of the geoparks concept, regarding heritage conservation and in particular geological heritage. Consequently this melange of interests may be drawn together and considered as an overarching policy addressing sustainable territorial development (Martini, 2000). The making and shaping of policies within geoparks can therefore be seen to constitute another core aspect of the model. In turn, as the network has expanded to incorporate increasingly diverse geological, political and cultural settings, this has

brought it into contact with an equally expanding variety of policy considerations in those individual localities.

This thesis is concerned with the movement and enactment of the geoparks policies, in particular as they are reinterpreted on the ground in individual geoparks or as Wedel et al. (2005: 35) expressed it, the anthropological interest is in 'What do people do in the name of policy'. It is significant therefore, that when approached from the corner of anthropology, policy is not treated 'as an unproblematic given but rather as something to be problematized' and reflected upon (Shore et al., 2011: 8). The route that I have taken in my field research to 'problematize' geoparks policy is to examine closely over an extended period of time how each geopark case study has individually treated and translated the policy as centralized through the geoparks charter and statutes (UNESCO and IUGS, 2016). This involved considering what different and changing gatherings of actors are being assembled to facilitate the implementation of the policy(ies), and which strategies or areas of emphasis are placed in each locality.

Equally, anthropology does not view policies as essentialised, discrete, bounded objects, but as practices that are continually contested across a variety of agents, actors and sites. It is therefore given that a major part of anthropological investigation of policy areas is concerned with examining not a specific people or individual institution, or less still policy as a boxed and packaged object, but to follow changing processes that are shaped within political and social contexts (Shore and Wright, 1997). A further attribute of policies is that once generated, they often migrate into new contexts and settings where they may transform to

bring ramifications that stretch past the aims for which they were originally formulated. My observations across the geopark case studies found that with shifting political circumstances, as well as changing physical and social conditions, the geoparks policy could be seen to change and migrate over different times – for instance before, during and after a volcanic eruption, or before and after a referendum or a change of government - as well as across a variety of spaces or destinations. This thesis therefore views what the implications have been of unpacking or problematizing policy at these different points and moments.

As well as geoparks policy being shaped and applied within new geographical, cultural and social settings, another strategic shift has occurred since 2010 with the target of formalizing its hitherto ad hoc relationship with UNESCO. In this period, the geoparks concept has evolved from a 'grassroots' policy response to a perceived lack of governmental interest or action (Martini, 2000), to a global network increasingly connected to supranational organisations and their respective priorities and strategies (Fukami, 2014). It is with such considerations in mind that I observed geopark policy as initially shaped within the geopark network committees, conferences along with other national level forums, and then eventually as they are interpreted in the three case study geoparks. During the evolution and expansion of the geoparks networks and through its changing engagement with UNESCO, each geopark has in turn had to reassess their partnerships and in particular the hybrid and heterogeneous gathering of local, national, regional or international agents and agencies that geoparks policy has been enacted with and around. In the subsequent sections I indicate the nature of

the contestations of geoparks policy as they occur within the discrete self-defined locality of the geopark

8.5.1 - What is the geoparks policy and how is it enacted?

As presented in the introduction to this section, the geoparks model became consolidated around an essential concept of policies to support and achieve 'sustainable territorial development' (Martini, 2000). The fuller context of the birth of that statement is provided in the introductory chapter of this thesis. In written form however, following the exchanges and initial meetings of the first four geopark locations (Frey et al., 2001a; Martini and Zouros, 2001; Zouros and Mc Keever, 2004) the concept has come to be framed and expressed in two central documents that are utilized to define and instruct the further proliferation of the model. These are the Geoparks Charter (Frey et al., 2001a), and the evaluation and revalidation forms (EGN, 2017a). More recently, to clarify the position of the geoparks model within its now wider UNESCO framework, a third document, the operational guidelines (UNESCO and IUGS, 2016) has been produced as one of the conclusions from over four years of meetings and lobbying between the geoparks networks and UNESCO (Marble Arch Caves interview, 2015).

It is worthy of note that the word 'policy' does not directly appear in any of those documents. Instead and unsurprisingly since they have been drafted predominantly by individuals with an earth sciences background, the text is typically delivered 'in the neutral language of science' (Dreyfus and Rabinow, 1982, cited in Shore and Wright, 1997: 9). This neutralising process has made the geopark policy appear logical and linear. The documents although retaining a

constant fundamental direction, are discussed, tweaked and filtered by the geoparks coordination committee following recommendation from the geoparks advisory committee (English Riviera interview, 2014), but not reflected upon in depth when analysed over the range of contexts in which it is now applied. I observed that progression in practice during a number of different EGN and GGN conferences between 2010 and 2016. The process was also summarized during one interview in the following terms: 'from memory every EGN meeting I've been to there's been a section on reviewing the revalidation forms and questioning certain bits and making changes to make sure that it works properly' (English Riviera interview, 2011b). Although travelling via an ostensibly political process of debate and voting on alterations at the coordination meetings, the shaping of the geoparks policy documents in leaving out overtly political expressions does ensure they come across as 'mere instruments for promoting efficiency and effectiveness' (Shore and Wright, 1997: 8).

The concept as described above, outlines how one expression of the geoparks model is enacted. But what insight can be gleaned from the case studies with regards to how and through which processes the geoparks concept and its guiding policy documents are practiced in the geopark territories? One point that can immediately be made is that as a result of the four yearly revalidation and the extensive forms that have to be completed, each geopark is acutely aware and regularly reminded of the geopark paradigm as projected from its GGN committees and UNESCO centre. If any site does not accord with that process, then the card system ensures a protocol is enacted which ensures the geopark is ejected from the network (UNESCO and IUGS, 2016). This has occurred on a number of

occasions, although the procedure is generally conducted in a discrete manner (English Riviera interview, 2014). The revalidation process, including self-analysis and scrutiny from experts has become normalised and left as unproblematic. This occurs even though there is no recourse by the individual geopark management team to argue decisions, or question the relevant experience of the evaluators during their missions and subsequent reports. I shall return to this example of auditing culture (Strathern, 2000) and how it informs the shaping of geopark governance, in the subsequent section of this chapter.

Each of the geopark case studies does show, however, that although the advice by means of the geopark charter, guidelines and statutes as presented by the EGN, GGN and UNESCO (UNESCO, 2016a; EGN, 2017b; GGN, 2017), points to a type of logical manufacturing process, the responses by individual geoparks are contested as they attempt to fit to their local conditions. The individual applicant geopark continues to follow the advice of the geopark network, attends and builds up an understanding of the model through their presence at formal EGN/GGN conferences or trainings. However, the considerations as to how the geoparks approach can be adapted to the local settings are left devised through the individuals who have attended those conferences and the gathering of partner organisations that they can connect with and that are convinced of the benefits in bringing the model to their locality (English Riviera interview, 2014). I consider that the geopark policy is thus seen to remain essentialised at certain points (as seen in the evaluation-revalidation phases), but in other areas such as in the construction of geopark consortia and partnerships a discrete adapting and interpreting of geopark policy is made. Yet the consideration of those choices and

the reflection on decisions of governance in the geopark, occur around the interfaces in the individual geopark and, as I have observed, they have never opened out as contestations at the geoparks public stages such as the EGN/GGN conferences.

In terms of the self-defined boundaries of a geopark territory, it is worth recalling again that the adaptation to form a geopark begins with geology and geological heritage. Responding to this aspect of the policy, each of the case study geoparks had a geologic heritage to select from that could have extended beyond where the eventual geopark boundaries were drawn. But what influenced the setting of the geopark limits in all three sites were their political borders and the assessment of how they could be grouped into a manageable and practical partnership. Once the boundaries had been defined, the responses in terms of setting out or responding to policy priorities established in that territory, demonstrated that what was being enacted in the geopark was not a singular or reified expression of 'sustainable territorial development', but replies to the particular circumstances as understood by the individual geopark consortia. The movement and relevance of the central geopark charter to those local problems was seen to be fluid and fluctuating or as Shore and Wright (2011: 3) expressed it, the policies 'acquire a life of their own that has consequences that go beyond the original intentions'.

The capacity of the individual geopark to thrive in those moving conditions was seen to be influenced by how effectively the aspiring geopark project had unpacked and considered the geopark concept. The geopark policy guides that type of decision by suggesting the formation and implementation of a management

plan: ‘that provides for the social and economic needs of local populations, protects the landscape in which they live and conserves their cultural identity’ (UNESCO and IUGS, 2016: 8).

The eventual form and ongoing strategic reappraisals of those management plans, are handed over to each geopark consortium to devise. Hence the key expression ‘management plan’ is left broadly as another taken for granted term. It currently rests on the assumption that the brief framing comments in the GGN statutes:

‘It is recommended that all relevant local and regional actors and authorities be represented in the management of a UNESCO Global Geopark. Local and indigenous knowledge, practice and management systems should be included, alongside science, in the planning and management of the area’. (UNESCO and IUGS, 2016: 8)

, are sufficiently understood in each geopark context. The taken for granted application of the term ‘management plan’ however, does not provide a consideration of the influence and role of individual coordination staff. In the case study geoparks, the issue of continuity in key staff positions and how those positions could be maintained proved to be important factors in the sustaining of each geopark’s plans. The following section summarises how the case study sites made their individual readings of the term, as in practice for a management plan to be applied it has to be unpacked.

A crucial aspect in the MAC Geopark when it came to implementing its strategy is that in a sense it has predated the geopark model as its centre piece of the Marble Arch show caves and has been active since 1985 as an increasingly successful focus for rural development in a previously neglected corner of Ireland (Murtagh, 1998). A significant aspect of the development is that it has been coordinated as well as principally funded through the local government agency of Fermanagh district council. The management relationship and the coordination staff's perspectives on geotourism that had already been taking shape, then in turn became an influence upon the gradual development and defining of the geopark policy documents (Marble Arch Caves interview, 2017b). Having been in that broad configuration for nearly twenty years, from 2007-2008 the MAC Geopark then underwent two changes in territory and partnership that altered the previous balance of its management and approach to geopark and local policy. Those expansions brought in new landowning partners, new geosites and landscapes, and with the extension to include Cavan county council, the inclusion of operating across different jurisdictions and borders. However, there were significant continuities during that period and subsequently. Firstly, the original coordinating staff were retained, which also ensured a continuation in the relationship and input between MAC Geopark and the EGN. Also through a progression of EU programmes, directly and indirectly linked to support of the Belfast agreement (Karari et al., 2013), the geopark through the partnering local government stakeholders was able to secure a sequence of funds that kept MAC Geopark active throughout the entire period (Marble Arch Caves interview, 2016). Although strategically taking advantage of this sequence of events, MAC Geopark management throughout this period did not tie itself to a dedicated 'plan' per se.

The processes as the geopark policy was interpreted and enacted in what became the English Riviera Geopark, followed a quite different sequence. Instead of being a neglected corner in developmental terms, the geopark in Torbay is the setting for a mature tourism destination that has been attracting visitors for well over a century, which had faced a decline that was proving difficult to address (Bryon, 2013; Torbay Development Agency, 2005). The initial motivation to adopt the geoparks model here, was closely connected to this situation, and defined clearly in a management plan devised and facilitated by Torbay Council that identified: 'an over-riding principle is that we achieve regeneration in a sustainable way' (English Riviera Geopark Organisation, 2007). The geoparks model was in turn seen as a complementary method to draw together the diverse materials of geological, cultural and built heritage around the bay, and provide a more coherent umbrella organization through which to manage, conserve and develop those elements (English Riviera interview, 2011b).

The partnership that was devised consciously sought to remain compact and involve a pivotal role by Torbay unitary council whose boundaries coincided exactly with those of the geopark. The management also drew together agencies that for the most part were complementary to the mixed conservation, education and development tasks as set out in the geoparks charter (English Riviera interview, 2011a). The response and plan additionally paid close reference to a number of other local policy initiatives, including issues relating to health and wellbeing. A consequence of this has been that the geopark has managed a balanced commitment to the geopark charter by means of a "wider buy in by local

organisations" (English Riviera interview, 2014) and supported by council as this has had a greater overlap with its overarching policies. One further factor has been the implementing through a management organization (English Riviera Geopark organization) to retain close and effective relations with the most senior figures within the council. This is done explicitly so that communications are direct with figures who "can make decisions, especially financial ones" (English Riviera interview, 2011a). This has placed English Riviera Geopark where it is in a better position to 'shape policy decisions and their implementation' (Wedel et al., 2005: 39). This understanding of the taken for granted 'management plan' term highlights a quite different approach which has drawn a response influenced by closer control from a coordination grouping more directly influencing policy concerns. The English Riviera Geopark has been sustained not least as it has been involved in an ongoing reappraisal of its plan, even though the formal document drafted originally in 2007, has not been rewritten.

Studying through the setting and processes that took place in Katla Geopark, one finds yet another alternative trajectory for enacting the geoparks model and unpacking the significant terms outlined in the geoparks policy. Its acceptance into the geoparks network in 2010 came ahead of the point that the geopark coordination team had managed to define specific roles for each of the partnership organisations (Katla interview, 2015b). The background policy terrain that immediately related to this corner of south Iceland was less thoroughly examined and connected into the application that was submitted. This was partially due to the greater influence of national politics and a less influential role taken by the

local municipalities who formed the centre of the geopark consortium (NOHNIK architecture and landscapes, 2016; Katla interview, 2015a).

The backdrop to the entry of Katla Geopark into the EGN was certainly not aided by this period coinciding with the harshest economic hardships and governmental changes, not just policy changes (Jóhannesson and Huijbens, 2013). The absence of a dedicated management plan, along with a weaker understanding of the intentions and direction of key policy areas as enacted locally, meant that when it came to funding, or the provision of staff resources, the geopark coordination team was having to make reactive and opportunistic responses (Katla interview, 2015b). The policy conditions that I was informed had been assembled around Katla demonstrated for instance that a consideration of tourism policy in the geopark did not entail merely conducting discussions and looking at plans with the three local municipalities. With tourism policy being considerably guided at the national level in Iceland (Lindqvist et al., 2013), the eventual assemblage of actors consequently resembles a description of local policy that Abu Lughod (1991: 42) provided, whereby it be considered as: 'multiple, intersecting and conflicting power structures that are local but tied to non-local systems'.

At the time of the application and entry into the geoparks network, it appears that the type of nuanced and opened out consideration of significant geopark policy terms like 'bottom-up' was not conducted. Instead matters of fact like the arrangement of geosites, and the erecting of interpretation panels initially took precedence, and were being conducted in a setting where the association of policy actants were not acknowledged or engaged with. These actions conducted in the

audit culture environment of geopark evaluations, brought consequences that came most dramatically into focus with the issuing of a yellow card following Katla's 2015 revalidation mission. Fortunately for Katla Geopark the response to this situation between 2015 and 2017 was rapid and quickly identified a partnership along with defined roles that reflected the swirling mix of policy actors that could understand and deliver responses to the issues Katla Geopark needed actions on (Katla interview, 2016). This series of episodes highlights the benefits of reflecting, problematizing and recognizing the gathering of policy assemblages in the geopark locality – but which can be obfuscating to simply call 'local'.

When analyzing the geoparks policy from an anthropological perspective, one further trend which the data presented from the case studies allows to be critiqued and opened up, and which plays a prominent role in the charter and much framing of the model, is the use of dichotomous frameworks (Gould, 1987; Wedel et al., 2005). The most prominent of these, as seen in the narrative and debates around the geoparks model, is the placing of bottom-up versus top-down approaches. As presented earlier, the identification of a bottom-up approach came in response to the frustrations that governmental agencies were being seen as weak in acknowledging and responding to the needs for conserving geological heritage (Martini, 2000). The framing of this dichotomy was subsequently left as a taken for granted aspect of the model. The preceding intricacies of a more than decade long debate being abstracted to position any form of governmental intervention as being top-down, and any motivation from agents to take policy into their own hands, as bottom-up. This simplifying model for organizing thought is no newcomer to geology as a discipline as, 'other misleading dichotomies are mired in

the tradition of whiggish history in science, including the divisions that have so badly miscast the history of geology and its discovery of deep time: uniformitarianism/catastrophism, empiricist/speculator, reason/revelation, true/false' (Gould, 1987).

In the processes by which the geoparks policy are interpreted, the proliferated geoparks follow the dichotomy and consider, as their actions are not derived from larger national governmental agencies, their response is bottom-up. However, when the composition and actions of the consortium, other actors and organisations are analysed in more detail as in the ways presented in the case study chapters, it is apparent that 'local' responses bring together a complex array where certain ideas involve people and places that have an immediacy to a site. One example that helps progress this argument can be taken from Marble Arch caves and the decisions from the local authority in Fermanagh to develop that resource. In that context, a crucial factor to the development of the geopark has been the agency brought by EU regional development funds framed in Brussels and filtered via governments in Dublin, Belfast and London. That agency would be difficult to describe as being local or bottom-up. Even more stark is the positioning of UNESCO and its earth sciences department in the frame of every geopark, now that the model is formally a part of that inter-governmental agency (UNESCO, 2016a). All bring an assemblage which comprises top, bottom, senior, junior, geologically ancient and geologically contemporary heritages, and thereby expose the flawed nature of dichotomous frameworks (Wedel et al., 2005). The opening up of assemblages applies equally to other taken for granted facets of the geopark charter such as the use of the term 'geotourism'. However, this is one area where

the individual geoparks have already begun that opening out procedure. For instance, in the English Riviera Geopark the coordination team had long considered the narrow notion and identification of geotourism (cf. Dowling and Newsome, 2006; Farsani et al., 2012; Hose, 1996; Hose, 2008; Mc Keever et al., 2006; Newsome and Dowling, 2010) as being inappropriate stating: “Mark has got it bang on really when he said who in their right mind is going to book a geotourism holiday. The reality is you don’t go and book a geotourism holiday, you book a holiday” (English Riviera interview, 2011a).

8.5.2 - Audit cultures and geopark revalidation

The evaluation and revalidation procedures have been placed as a central strategy for the geopark model. The rationale behind this has been presented as being in part a response to the observed frustration around the lack of accountability in inscription and maintaining of inscribed UNESCO world heritage sites, and a desire to make the geoparks model more dynamic and responsive than that (Martini, 2000). The perceived lack of transparency and in particular noting how in the UNESCO world heritage committee 'state-appointed ambassadors and politicians, rather than cultural or natural heritage experts, dominate their national delegations' (Meskell, 2015) has been a further factor of influence for the geopark revalidation process. Through its stated commitment to accountability, and pursuing of good practice (GGN, 2013) the revalidation process is deployed as a method to ensure that the commitment to adhere with the principles of the geopark charter are enacted in practice by the actions of the individual geoparks. The geopark charter as indicated earlier in this thesis, has been described as the geopark’s policy tool (Madonie geopark, 2004), but I suggest that it also guides as

an ethical and professional code of practice for geosciences in the realm of heritage, conservation and development. This is probably most clearly exemplified with the instruction given in article 2 of the charter as a response to the trade of geoheritage through rock-shops and fairs where it is stated: 'No loss or destruction, directly or via sale, of the geological values of a European Geopark may be tolerated' (Frey et al., 2001a; EGN, 2017b). Since the Global Geoparks Network has been formally incorporated within UNESCO, the subsequent 'Statutes of the international geoscience and geoparks programme' (UNESCO and IUGS, 2016) further embed the ethical, professional and accountable design for the practice of the geoparks model.

The processes of geopark policy, its ethics and codes, along with the accountability and audit of its revalidation forms and missions, demonstrate a relationship that has strong echoes with the similar triad of practices and interests which Strathern (2000: 282) described as converging in a variety of contexts around ideas of audit and accountability, and that collectively have been termed 'audit cultures'. The techniques of auditing are dominated by quantitative measures and in many of the case studies described connect into indicators, lists, league tables and rankings (Shore and Wright, 2015b). Arriving in an ever-widening range of settings the concept of 'audit culture' has more recently been defined as incorporating: 'the widespread proliferation of these calculative rationalities of modern financial accounting and their effects on individuals and organizations' (Shore and Wright, 2015b). As a further demand for transparency, the audit process is generally conducted by expert professionals who are external to the organization being audited, although a reflexive self-monitoring aspect is commonly incorporated to

support the specialist evaluator (Strathern, 2000: 283). The trinity of policy, ethics and audit, Shore and Wright (2015: 422) argue are interwoven aspects of an assemblage moved by a rationale that targets accountable organization and governance. Combined with the statistical techniques and measurements that predominate, it is suggested that the audit culture practices are moving towards a decontextualized 'governing by numbers' (Shore and Wright, 2015: 421). One of the challenges when faced by such an apparatus of accountability is that 'audit is almost impossible to criticize in principle' (Strathern, 2000: 3).

In principle it may seem that audit is placed merely to act as an assessment on the quality and efficiency in moving towards a policy objective (Strathern, 2000: 282). But it is noted by Power (1997) that with the questions and measurements established by the audit process, this shapes the responses and directions of activities to: 'transform the environments to which they are applied'. Now extending over two decades, studies have been conducted on how audit culture is enacted over a diverse range of situations and sectors from public service providers in health, education, transport to businesses, NGOs, intergovernmental and supranational agencies such as the European Commission (McDonald, 2000). Across this now extensive body of work several authors notably Power (2005) and Shore and Wright (2015b) have now begun to consider where areas of comparison can direct one towards notable effects and consequences of the audit process. In this following section I shall connect with the issues and impacts inside audit culture that the geoparks revalidation shares similarities with, and what this informs us about the model.

The onus of responsibility during the geopark evaluation and revalidation processes is rested upon the individual geopark sites to be seen not only to devise links and interpretations to the geopark charter and statutes at the onset of its incorporation into the geoparks network, but to demonstrate that 'progress' (EGN, 2017a) that can be checked every four years by GGN evaluators has been made. In other words theory or plans have to be seen to be put into practice, and this is demonstrated through responses in the self-evaluation forms and shown in the geopark site to the visiting expert evaluators (English Riviera interview, 2011b). Representing a central aspect of the geopark revalidation, the initial conducting by each geopark coordination team of a self-evaluation ties the geopark into the terminology and priorities set from the GGN. This form of self-checking and reflexivity, is shared as a common component with the concept of audit cultures and through the directing of what the organization (in this case the geopark) has to respond to in regards to terms, categories, points that describe or define best practice, it shares much with what Shore and Wright (2015: 426) terms a governance effect.

During my examination of the case study geopark sites, each of them in at least one point of my fieldwork were engaged in preparation for or recovering from hosting revalidation missions. At that time it became apparent which terms and categories of evaluation were a cause for concern and which shaped the focus of the geopark organization. Amongst these a disproportionate amount of time and effect was exerted around the issue of signage and visibility to ensure visitors and local population were aware that they were in a geopark and knew where its boundaries and principle attractions were. The anxiety and activity generated to

ensure there was a satisfactory judgment on this criteria, certainly accorded with the consequence of audit describing how it changes the focus as: 'activities become increasingly focused on the measures by which their performance is judged' (Shore and Wright, 2015: 430). This point is contextualized when one looks where priority actions in the geopark rest once the cycle of audit process has been concluded (until four years hence). Certainly signage continues to be considered and acted upon, but the emphasis it takes to impress and bring the audit mission to a positive conclusion, is not sustained with such an intensity.

Considering the increasingly diverse settings and partnerships by which geopark consortia and projects are devised, the regular process of opening up to the external scrutiny of the reporting forms and hosting of revalidation missions every four years, as well as working through a more abridged yearly expression in the annual reporting to GGN, can be seen as a crucial way to cohere the disparate geopark family around the central policy (UNESCO and IUGS, 2016). The process of revalidation auditing is non-negotiable too as a component of membership as a UNESCO Global Geopark. The enacting of the sanction when this is not adhered to has been evidenced in several cases where existing geopark member locations were given a red card expulsing them from the network as they were unable to afford the costs of flying over the evaluation mission and hosting them for the audit. The governing effect of external audit moving to: 'render commensurable and controllable all kinds of disparate individuals, institutions, and objects with diverse and incommensurate features' (Shore and Wright, 2015: 430), also resonates with another form of strategy to bring disparate enactments around a singular policy, that of syncretism (Law et al. 2014) – I shall expand upon the

different modes of syncretism as expressed in the geopark sites further into this chapter.

Particularly in the summarizing work of Shore and Wright (2015) the overwhelming reaction to the advancing march of audit culture into new domains is of negative and undermining consequences to the agencies and organisations at the receiving end of audit practice. A factor in this positioning, is their opposition and wish to balance the introduction in every conceivable policy area of neo-liberal frameworks for management and governance (Power, 1997; Shore and Wright, 1999). In the case of expressions of audit culture located in the geoparks model however, the policy it is assembled around is not one relating to neo-liberal practices of privatization and 'governing at a distance' (Shore and Wright, 2015: 430). Instead the policy rationale around geoparks is seeking for audit to contribute towards its acknowledgment of the model as a rigorous, progressive response to the previous relegation of the significance of geological heritage and conservation, and for the geoparks initiative to be considered a professional approach and a more dynamic improvement upon previous UNESCO models. As a consequence, rather than becoming a 'mundane administrative and technical matter' (Shore and Wright, 2015: 421), the revalidation and audit period is viewed as more positively by geoparkians. In some cases it has become a form of rallying together for a geopark's management team and stakeholders and a time of heightened focus on the plan and objectives the geopark has laid out for itself. This was most directly stated by the staff at the English Riviera Geopark, who explained how it "certainly highlighted to us the areas that we were not so strong on, and things that I had to do something about. It also brought the geopark management

group closer together, because there was this very strong target to work towards". (English Riviera interview, 2011)

As a practice of audit culture in geoparks, the revalidation is also a crucial policy matter as the results lead to swift sanctions through the card system (see chapter 1 for further detail). This occurred to Katla Geopark which following inspection in 2015, was awarded a yellow card later that year. Even prior to the revalidation mission, the management team were aware of the process due to the standardized forms (EGN, 2017a) and the brief discussions all geoparks are privy to at the coordination committee meetings, in regards to the deliberations of the advisory committee in relation to the missions (Katla interview, 2015b). The knowledge about the process has meant that geopark management teams are aware of the ways in which they need to prepare in order to secure a favourable result. However, the responses to that situation are dependent on how the particular geopark coordination team can lever support from their wider consortium, which in turn reflects upon the manner in which the management plan is enacted. With both the MAC Geopark and English Riviera Geopark, the partner agencies that can rapidly draw upon resources such as staff time, in both cases this is the local authorities, were responsive to requests for further support at the time of revalidation period. This is also due to the ongoing positive political support in those agencies for their local geoparks.

In the case of Katla Geopark, resources were not immediately available, in part because of the lack of clarity or responsibility in roles for each of the consortium partner organsiations. However, the motivation to retain their "hard earned global

geopark status" (Katla interview, 2015b) acted as leverage once they had been issued the yellow card. This allowed for the coordination team of Katla to lobby up to higher political authorities and present the immediacy of the situation. In 2015-2017 this has worked for Katla as they have secured a series of new agreements and partnerships from governmental agencies (Háskólafélag Suðurlands, 2016b), which had previously not partnered with the geopark (Katla interview, 2015a). The reward of membership in the geoparks network for an additional four years if the revalidation process is positive, shares the audit culture method of 'rewarding success and punishing failure' (Shore and Wright, 2015). However, unlike the description of audit culture in other sectors or arenas, there are no ranking or tables of geoparks area following the assessment phases. This ensures there is a somewhat different dynamic with regards to the audit process. Although it is widely seen to be a stressful and challenging period, the benefits in terms of leverage (of the sorts described above) and renewed understanding or commitment to the geopark project, are again most widely viewed as justifying the auditing process (English Riviera interview, 2014; Katla interview, 2015a).

8.6 - Actor Network Theory as addressed around policy worlds

ANT has been described more as a methodological toolkit as a means to examining radical relationality (Law, 2016) rather than a pre-conceived theoretical stance (Law, 2009). The tools presented through ANT suit well the activity of following the diverse and rapidly growing web of connections or links across human (e.g. committee members, geopark staff) and non-human (e.g. rocks, landforms-landscapes, narratives and geostories) actants present in geopark sites. I have

particularly utilized an ANT informed approach to follow agency around the processes relating to the geoparks policy as it is practiced through the gathering of numerous different assemblages of heterogeneous materials in the different member localities across the network of geoparks (EGN / GGN). The transmission of the geoparks charter and statutes, although voted upon within the coordination committee (CC), is presented down to each individual geopark as a singular directive.

Alternatively, by observing such practices through an ANT lens, one adopts a technique that aims to dismantle bounded objects or terms, which have assumed all audiences universally attach the same understandings and suppositions. In identifying the composition of the collection of actants that may be found to converge at the time or point the observer is engaged in the field, they can then move beyond the obscuring smokescreen that is an unopened or unchallenged term or concept (Law and Singleton, 2014). A number of these 'taken for granted' assumptions in the geoparks policy, such as the ubiquitous 'management plan', have been introduced by means of the case study data earlier in this chapter. One further and significantly impacting assumption is that which relates to the top-down - bottom-up dichotomy. Through a perceived lack of governmental recognition and response to the heritage issues on interest (Martini, 2000), 'Geoparks adopted a "bottom-up" or community-led approach to ensure that an area's geological significance could be conserved and promoted for science, education and culture' (UNESCO and IUGS, 2016). That distinction and the reiteration that geoparks operate through a locally devised project ideas and

consortium, has been stated at each subsequent turn in the evolution of the model (EGN, 2011; EGN, 2015b; GGN, 2017; UNESCO and IUGS, 2016).

On the ground however, the situation was observed to be quite removed from such simplified divisions. At MAC Geopark for example, the bottom-up move for the geopark to support local development has been seen in the case study to detail a policy process that is closely and immediately linked to programmes and funding that are primarily guided from Brussels, Belfast, Dublin, and sometimes London (Bush and Houston, 2011; Karari et al., 2013; Colgan, 2015) and only partially enacted through local agencies in the geopark. The assemblage of heterogeneous materials within, for instance, the policy on cross-border tourism as a component of the Good Friday peace agreement (Teague and Henderson, 2006) as applied in the MAC Geopark area, demonstrate that they are not simply local stakeholders or not simply human actors involved. The mix has documents, local councillors, national agencies, small companies, farmers unions, a range of landowners and numerous other actants. This ensures a straightforward 'local' decision say on signage is not generally forthcoming, but has to incorporate a much wider gathering of agents (Marble Arch Caves interview, 2017b).

The response of the Katla Geopark to the geopark network's call for bottom-up projects brings a further facet into view. The development of a local consortium and primary targeting of a partnership taken from their South Iceland locality followed the recommended guidelines of the model (GGN, 2010) and Katla joined the global network in 2010. But their un-opening of the bottom-up dichotomy I suggest, played a role in exposing and making its management vulnerable to

subsequent policy and funding shifts which it had no control over, or close lobbying channels to inform national political channels of the situation and requirements of the Katla Geopark. There was little acknowledgment of the weak funding situation available for local authorities in Iceland or their lack of direct influence on policies impacting locally (Huijbens, 2014). The closed faith in the top-down versus bottom-up dichotomous framework in this case, certainly ensured it 'obfuscate[d], rather shed light on, the workings of policy processes' (Wedel and Feldman, 2005) that were at play in this case in Iceland.

The case study chapters in this thesis have also shone a light on some of the multiple practices that are emerging out of the seemingly singular policy to guide the geoparks model through applications of 'the' charter, 'the' structure and 'the' guidelines (GGN, 2017; UNESCO and IUGS, 2016). The different assemblages of geopark materials as practiced in alternative locations, bring about multiple realities rather than the single, linear replication, concrete expression or consistent brand, targeted by the geoparks charter. The attempts to bring and keep the various geopark assemblages together, have been seen to entail a significant amount of effort. In MAC Geopark although there was confidence expressed in the caves being managed as a geosite for over 30 years and as part of a geopark for more than 15, the process was indicated to always require "fighting your own corner" (Marble Arch Caves interview, 2017b). Similarly when speaking about the revalidation procedure, another staff member expressed "it's a hell of a process and its really time consuming and you've really got to focus on it" (English Riviera interview, 2011b). The different combinations in each site, pulling together alternative schemes, types of agency to partner, forms of management or

understandings of terms such as 'geotourism', 'bottom-up', 'networking', result not in different perspectives of a geopark, but to invoke (Law, 2016) terminology, they are distinct 'versions'.

Outlined in the cases above, when enacted through the multiple assemblages mapped out in practice at the various geopark sites, there are multiple geopark policies to contend with, which additionally do not remain static for extended periods. The modes of response employed to manage and balance such diversity within the geoparks policy, can find some parallels with the strategies that Law et al. (2014) have suggested are deployed to work with an idealised 'pure' version of a practice simultaneously alongside many 'noncoherent' or messy interpretations. The expression that Law et al. (2014) use to describe these approaches to accommodate both (pure) and (messy) is described as modes of syncretism. The concept of syncretism complements and merges with the processes of problematizing, unpacking essentialized terms and observing contestations, that are the core elements of an anthropology of public policy which have helped to bring insights into the geoparks model generally and the three case studies in particular. In the next section I therefore introduce how forms of syncretism may be viewed in practise within the context of geoparks.

8.6.1 - A practice of syncretism in the geoparks network?

The process of syncretism has been more broadly prefaced in chapter 2 which introduced the aspects of a conceptual framework for this thesis, but synthesised down to a single statement it has summarised as consisting of: 'a continuous process or effort to make the non-coherent cohere' (Mellaard and van Meijl, 2016:

12). Within the geopark case studies presented in chapters 5,6 and 7, the framing of all the centrally devised materials, such as the geoparks charter, the guidelines and the evaluation/revalidation forms and missions, all appear as tools to generate a coherence and to secure boundaries as to how geoparks should be practiced. The maintenance of a pure vision, or as described by the geoparks network a strong brand, follow the normative aspect of syncretism as considered by Law et al., (2014). In turn when the interpretations and enactments of the geopark model are viewed in the individual case study geoparks, what can be observed is a juxtaposition between the clarity and purity of the central rules and documents of the geoparks network, and the heterogeneous expressions as each geopark consortium assembles something rather more individually adapted. Nonetheless, the solidity of the network meetings and conferences, as well as the close coherence through the revalidation missions and processes, all show that a 'simultaneous coexistence of different, possibly conflicting factors or features' (Mellaard and van Meijl, 2016) does occur with lesser (Katla Geopark before 2015 revalidation mission) or greater degrees (Katla Geopark after the 2015 revalidation mission) of stability.

In summary, as introduced by Law et al. (2014) syncretism may be a helpful approach to utilise in a setting where there is a combination of pure and messy interpretations or practices. In particular the concept assists when thinking through how potentially conflicting and clashing modes are held together, as they search to achieve some form of consistency that acts to persuade everyone that instead of a confused jumble of individual interpretations there is indeed a single concept, model or policy. As with all the methods employed in the discipline of STS,

the relationality of pure and heterogeneous elements as gathered in practices of syncretism, are always considered through the use of case studies (Law, 2016). This is because theory and practice are not separated but understood as part of a single weave. Following observations around a series of different case study situations, Law et al. (2014) considered a variety of alternative methods that they concluded had been employed to ensure forms of syncretism were maintained. This has led to an initial and non-exhaustive description of six modes they termed: denial, domestication, separation, care, conflict and collapse (ibid). Looking across the three geopark case studies conducted in this thesis, I could recognise aspects from several of those listed modes being applied and adopted at different times in the geopark sites. These strategies it should be reiterated were not mutually exclusive, but do help to inform what emphasis or perceived noncoherence had been identified at a given time as a specific assemblage of elements associated around the geopark site. The most apparent modes of syncretism as seen practiced in the geopark case studies are as follows:

Denial – This mode is one that is essentially idealistic, and operates in denial of the multiple and 'messy' procedures required to maintain the model. The expressions of non-coherence are accordingly rebuffed (Law et al., 2014). If we look to the geoparks model, this may be considered to occur in the form of the simplified definitions and structure as to what an ideal geopark should incorporate and appear as. The process of four yearly revalidation and self-evaluation along with the related yellow or red card sanctions, appear to map out a desire from the GGN – UNESCO to ensure the practices cohere and that non-coherence is processed efficiently by the card system. That system has been enacted numerous times

leading to the issuing of yellow cards such as the one received by Katla Geopark in 2015, and red cards by a lesser, but still significant number of other geoparks throughout the relatively short history of the geoparks network. Equally, no resistance overall is offered to the singular practice of revalidation by individual geoparks who have no choice but to conform if they are to remain as a member in the GGN. This is confirmed in descriptions of the coordination committee meetings by interviewees from each of the case study geoparks I observed.

Domestication – In this form of syncretism the presence of noncoherence is acknowledged but it is dealt with through various forms of training. The target is to deliver a distillation or refinement, with the different practices that are recognised being cultivated into something that is more homogenous overall (Law et al., 2014). In the realm of geopark cases, I recognised this mode being performed on the stage of the national geopark forum events, most noticeably at the Irish Geoparks Forum conferences and workshops I attended. One of the functions of the forum was to provide a platform for aspiring geopark sites to learn more about the model as presented both in terms of working through the key documents and geoparks charter, and as seen to be practiced through talks given from staff in existing Irish geoparks. The aspiring sites for the most part had been engaged with their projects to create a geopark over several years. This meant that they could present what progress and activities they had been engaged in. Then through questions, discussions and observations during geological field trips around the geopark site that was hosting the event (the Irish Geoparks Forum rotates each year to a different site), they could compare and contrast their progress with the cases seen and described at other geopark locations in Ireland. As the geoparks

network continues to grow, the function of the national forum is also to contribute towards filtering the number of applications nationally going forward to the EGN and UNESCO (Marble Arch Caves interview, 2016). Different geopark themes are covered at the different forum events, so one of the years I attended the focus was upon geotourism and where it fitted in with national strategies and developments. The suite of presentations thus delivered and trained what the ideal approach would incorporate. This mode of syncretism provides a space to see diverse approaches but then order or tame through comparison with ideals. For instance only those geopark projects that have worked towards completing and understanding this type of training, can then have a realistic opportunity to go forward and apply to become an official UNESCO global geopark.

Figure 26 - Irish Geoparks Forum workshops, training and study trips - part of the syncretic process of 'domestication' in practice? (Jonathan Karkut, October 2013)

Separation – A third type of syncretism moves on the rationale that different applications become noncoherent only if gathered collectively. The assumption being that the subject of coherence doesn't occur as long as the practices remain separate and never assemble together (Law et al., 2014). In the arena of the geoparks model, where a fundamental call of the charter is to meet, exchange and remain active in a series of dynamic networks and events (UNESCO and IUGS, 2016), the idea of holding diverse or messy practices apart may seem on the surface like an impossible task. Honing in on the case study sites however, it is possible to draw out a variety of strategies that are utilised to manage the situation that ensures different approaches do not hinder each other. In this context it is useful to recall one feature that is common to every geopark I visited and which I heard being expressed explicitly on many occasions that managing a geopark is a significant juggling act where time is of the essence. Most memorably this condition was conveyed when I asked one UK geopark coordinator 'when is a more convenient moment that I came come over to visit and talk with you about the geopark?'. To which he replied, 'there is never a good moment as we are always busy and under pressure with something, but of course you are welcome to come over any time'. In order to respond to these circumstances I observed how different forms of exclusion or dispersal were applied.

One stratagem comes in the shape of a distribution over time, whereby different responsibilities are conducted at distinct periods. For instance in the consideration of development through 'geotourism', the English Riviera Geopark presented in the revalidation forms and on the occasions of presentation at geopark conferences, responses in question boxes with numbers or descriptions of geological trails

created. These in effect shared the taken for granted, 'pure' practice that geotourism exists as defined in the geopark policy documents. At a separate time back in Torbay, there are the staging of the periodic geopark management group (GMG) meetings, attended by a small cluster of individual key stakeholders for the geopark who: "can make decisions, especially financial ones" (English Riviera interview, 2011a). At these meetings the dialogue is around the destination of Torbay and an integrated approach to tourism where geology is introduced alongside culture, arts and other aspects of heritage. The term geotourism is barely mentioned or acknowledged.

A second response to separation is through the dispersal of people and tasks. A certain staff member concentrates on one aspect, whilst another individual handles the responsibility for a different task. A division that resonates with this approach was described to me most clearly by one staff member at MAC Geopark. The team of seven full time geoparks staff are responsible for the quotidian operation of the geopark, including administration, the organisation of the visitor centre at the caves, guiding delivery of educational events and the upkeep of all the geosites. Amongst these staff the geopark coordination is conducted and two of the more experienced amongst these staff travel to represent MAC Geopark at all of the formal GGN meetings and conferences (Marble Arch Caves interview, 2016). All of the staff are employed by either Cavan or Fermanagh and Omagh councils. The direct geopark staff in turn are overseen by senior staff and councillors who are based in council headquarters. This second tier of management take responsibility for the wider spread of political and practical actions conducted around the councils including health, education, local economic development and as the

formal management executives, the overarching responsibilities for MAC Geopark. As described by one member of the geopark management team, "as long as the geopark is perceived to be operating well and without problems, we do not hear from the senior council staff" (Marble Arch Caves interview, 2017b). In effect they are separated from direct activities of the geopark. Overall this approach suits both parties as they are mostly eager not to overlap with each other's most significant activities.

The two styles of separation mentioned here in turn infer a third, spatial expression of separation (Law et al., 2014). This too was observable in MAC Geopark with the everyday tasks conducted by an operations team of staff taking place in the visitor centres and in the field around the geopark. Whilst the executive senior political staff handling their responsibilities mostly from the council headquarter offices. This form of division effectively coexisted whilst not operating in the same temporal and spatial domain (Law et al., 2014). It was mentioned also that this gap "was not necessarily consciously created, but sort of happened like that" (Marble Arch Caves interview, 2016). However, during a recent reappraisal of MAC Geopark's mode of governance, closer scrutiny of the identified separation between quotidian and executive or policy level activities as described above, has been requested. This has led to a new consideration as to whether a more integrated distribution of practices may be more effective at resolving strategic policy issues more continuously, rather than allowing them move to a point where urgent debate or action is required (Marble Arch Caves interview, 2017b).

But what do these modes of syncretism inform us about the geoparks model and policy, and about expressions of syncretism themselves? From the data extracted through the case studies, it is apparent that the enacting of geoparks policy is certainly a hybrid mixture of what Law et al. (2014) describe as 'both/and'. The policy assemblages of the geoparks are not restricted within a single organizational delimitation, such as UNESCO or even the NGO that is how the Global Geoparks Network is now formally manifested. Equally the heterogeneous assemblages in each geopark are seen to move through alterations over time, as different relations or partnerships are generated - for instance a trans-boundary linkage emerges in MAC Geopark with the extension of territory and introduction of Cavan county council as a partner - whilst others drop away, such as the elapsing of Katla Geopark founding organisations and the adding of new connections directly to the Icelandic prime minister's office. Seeing these movements, adjustments, creations of new strategies to manage different balances and juggling acts, I concur broadly with the assessment made by Law et al. (2014) that modes of syncretism are active strategies in accommodating 'both/and' combinations. But additionally I suggest that the overarching push from the GGN committees to create a pure singular brand that in turn requires individual geoparks to apply an array of syncretic strategies, occupies considerable time and obscures greater scrutiny of the conditions and contexts of the ground that result in 'noncoherences' which still work well in practice.

8.7 - Conclusion

The three interwoven conceptual threads have each been shown to be active and visible across the case study geoparks and the centrally framing GGN-UNESCO materials. The presence of a more adaptive hermeneutic and historical expression of geology (Frodeman, 2003) appears in the ways through which elements including Earth stories and geotourism narratives are practiced in each of the geoparks. Expressions seen in a variety of visitor centres and attractions also show up a desire to bring the Earth Sciences and Humanities into closer orbit and interaction. However, those efforts are at times contradicted or restrained through the deep rooted analytic norms of the traditional geological minds (Manduca and Mogk, 2006; Frodeman, 2014). Unsurprisingly, individuals drawing from a geoscience background dominate the geoparks advisory committee. But a tension appears most when the balancing of more familiar geology tasks (such as mapping, guiding around the field and presenting of scientific interpretations and facts), are balanced with newer obligations of extending different messages about sustainable tourism, other heritage expressions or differing methods of education, that have also been scripted into the geoparks narrative and policy documents (GGN, 2017). Whether a more continental philosophy of geology prevails as expressed through by geoparkian geoscientists, remains to be seen.

The policy of geoparks is also caught up in this to and fro that one sees in the central structures of the EGN, GGN and other nascent regional geopark networks, mapping out and expanding of a global vision adopted in each continent that as of 2015 finally found its formal home within the programmes of UNESCO (UNESCO, 2016c; UK National Commission for UNESCO, 2017). The tension of what is essentially a European framework, founded around European ideas of civil society

and bottom-up actions, with significant reliance of European Union finance, begin to show when the interpretations as viewed at the case study sites are explored. Taken for granted expressions such as geotourism and its placing or valuing, are seen to be assembled from more than a simple, singular set of materials. The striving for a bottom-up consortium with sustained pathways to funding, when observed more closely are seen to be enacted through a much more heterogeneous melange of actors. That is not to say that there aren't degrees of stability and huge efforts to bring in and retain partners from higher governmental and international authorities. That process in particular was boosted through the most significant steps taken to their zenith between 2010-2015 when each geopark forged a much closer link to their respective UNESCO national commissions and related governmental ministries. Also the geopark model showed up a number of similarities with concepts introduced regarding audit culture and syncretism. These relations and how the geoparks model informs us about some of those processes, shall be framed in the concluding chapter, along with suggestions as to where future anthropological research around the geoparks model may lead.

Chapter 9 – Geoparks policy moving from Galileo to the Anthropocene: some concluding thoughts

When Martini and Zouros introduced the geoparks concept and network in the first issue of the European Geoparks Network magazine (Martini and Zouros, 2001) and cited Galileo's most celebrated statement, 'eppur se muove' ('yet it moves'), it is hard to imagine they could have considered how rapidly and in what ways the geopark model would move around the globe. Spanning over a decade and a half of organisation of the model on the level of network advisory committee and coordination committee meetings and conferences, the bedrock of the model has been set around the geoparks charter (Frey et al., 2001a) and shaping guidelines including the evaluation and revalidation processes (EGN, 2017a; GGN, 2013). Though fine-tuned in the committees almost every year (English Riviera interview, 2011b), the shape and direction of those core documents has remained consistent and not erred from a linear pathway (Frey et al., 2001b; UNESCO and IUGS, 2016). Verbally this is reiterated through keynote presentations during all of the European Geoparks Network and Global Geoparks Network conferences that I have attended, with an emphasis on coherence through 'concrete actions' (EGN, 2015a) and 'strong brands' (EGN, 2013; GGN, 2014).

9.1 – State of the art in the geopark model

This thesis at its core has sought to analyse how the geopark model has not remained a static, indifferent object to that motion progressing in a linear fashion according to a universal and normative set of rules (Shore and Wright, 2011).

Rather, in thinking of the geoparks model as having a comportment and being a root of effects and affects, it may be more appropriate to consider an alternative translation of 'yet it is moved' for that Galilean quote, as Latour has used when reflecting upon the Anthropocene (Latour, 2016). This is the sense I adopted whilst pursuing the model as it was translated in different geopark locations from a common central charter and guidelines to its heterogeneous manifestations on the ground.

The case study locations in the English Riviera, Marble Arch caves and Katla, have shown up that they do interpret certain facets of the model in similar ways. Consortia of partners, certainly in the European setting of the three researched closely, see the linkage of council partners as a practical method of embedding local support and generating 'bottom-up' implementation (Martini, 2009; UNESCO, 2016c) of their projects. Equally as the geoparks are manifested on the ground, with an importance centred on the geological narratives and 'Earth stories' of their landscapes (Frodeman, 1995; Cervato and Frodeman, 2012), the modes of interpretation through panels, visitor centres, walking or cycling routes have a consistent approach. Then there are other features that are uncontested and obligatory within the statutes of being accepted as a UNESCO global geopark (UNESCO and IUGS, 2016). These include the necessity to complete the re-evaluation process every four years (EGN, 2017a), and to remain in touch with the other sites by sending two coordinating representatives from each geopark to attend the biannual EGN meetings and the annual conference. Reminders are conveyed to each geopark that they exist not simply as individual sites for conservation, education and development, but also share a role as reciprocal

components is a network of exchange which is now formally defined under French law as a not for profit non-governmental organisation (EGN, 2017b).

The presentation of a unified voice across the network when expressing elements of the geoparks policy, especially on public stages (e.g. conferences, promotional materials), come across as an 'unproblematic given' (Wedel et al., 2005) and part of a broader target to highlight a consistent charter and guidelines as being 'the geoparks philosophy' (Madonie geopark, 2004). However, this field research did not simply unearth differences as expressed through the geodiversity (Gordon, 2012; Gray, 2013) of landscapes and geological features. The balancing and commitment towards geoparks as a 'holistic concept of protection, education and sustainable development' (UNESCO and IUGS, 2016) remains a challenge to manage, particularly as the focus of each geopark's local consortium is influenced by its individual policy motivations. It is important to remember that the geoparks model and UNESCO programme has no central budget, and cannot use financial incentives to ensure a common enactment or approach. Instead there is a reliance upon all geopark consortia to understand and reflect the shared statutes and guidelines (GGN, 2017), and bring in policy and budgetary commitments to sustain the project locally.

As the case study locations were observed more closely, it was apparent that individual responses to the geoparks model came at quite different moments or times in respect to the stages of development, familiarity with sustainable tourism, or organizational and political frameworks of the geopark destinations. Consequently the stimuli and policy strategies taken by each geopark turned out to

be quite distinct. Marble Arch Caves Geopark centered its rural regeneration through the use of a geoheritage site that was coordinated by the local authority (Fermanagh District Council, 2008), and attracted a form of geotourism (Hose, 2008; Dowling and Newsome, 2010) long before it became a geopark (Marble Arch Caves interview, 2017b). The attachment of geopark status built upon that existing relationship and sought to expand the area benefiting in two phases. Firstly through the inclusion of further landholding partners in Fermanagh and then pushing across the borderlands region to include the neighbouring local authority of Cavan county council (Fermanagh District Council, 2008). The trans-boundary and post-conflict collaborative funding routes and policy programmes this allowed MAC Geopark to access, centered principally around the tourism 'area of cooperation' connected to the Belfast peace agreement (Teague and Henderson, 2006).

The English Riviera Geopark was established from quite a different setting. The unitary council of Torbay sought to use the model as a way of drawing together disparate heritage features and to bring a new layer to revitalize a mature destination long familiar with tourism (English Riviera Geopark Organisation, 2007; Torbay Council, 2007). Formed around a single local authority and small overall territory (100km^2), the emphasis from the management team was on having close contact and bringing in departments that were relevant and could support each of the geopark pillars of conservation, education and sustainable development (English Riviera interview, 2011a). But recognizing that structures do not enact policies (Shore and Wright, 2011), the coordination team identified the importance of having direct and regular engagement through their Geopark

Management Group (GMG), with individuals who "can make decisions, especially financial ones" (English Riviera interview, 2014).

Across in south Iceland, the Katla Geopark project aspired to use the geoparks model and geotourism development as a way to reactively stimulate a region that had been struggling against a declining rural population, particularly amongst those who had left area for their tertiary education studies (Katla Geopark Project, 2010). The geopark initiative was however, set in motion during an unprecedented period of economic and political uncertainty in Iceland (Matthiasson, 2008; Jóhannesson and Huijbens, 2010). One of the most impacted sectors at this time was that around tourism, which having been relatively marginal to the Icelandic economy, rose rapidly to prominence after the 2008 financial crisis, giving locations like Katla both opportunities and headaches (Jóhannesson and Huijbens, 2010; Jóhannesson, 2016). The challenge for the geopark management occurred not least because the agencies involved in its consortium had little influence upon tourism policy which was formulated primarily at the national level (Lindqvist et al., 2013) and the associated agencies had not initially been aware of the objectives and needs of Katla Geopark. Additionally the partners in the consortium were poorly placed to provide practical and staff support (Katla interview, 2015a) in the way that Fermanagh and then Cavan councils had backed the MAC Geopark for example.

It has been outlined during the methodology chapter how the pursual of a policy community (Wedel et al., 2005; Mosse, 2006), has led to a more fluid understanding of the concept of the 'field' in ethnographic field work (Amit, 2003;

Law and Lien, 2012; Schwegler and Powell, 2008). In turn this has influenced the combination of methods employed during the ethnography. One consequence of those decisions has been the creation of a more longitudinal study (Roberts et al., 2013) that has dipped in and out of sites. Over those extended periods, it has been possible to observe in particular how the application of geopark policy did not come across as a reified expression (Shore and Wright, 2011) static geopark consortia responding to a singular set of circumstances. Each geopark in their own sequence of events demonstrated processes involving regular changes and movements of personnel (sometimes peripheral figures, at other times more prominent and influential), the addition (Fermanagh District Council, 2008), dissolution or creation of partner organisations (Katla interview, 2015b) and the impact of shifting political posts or alliances and associated presentation of revised policies (English Riviera interview, 2014).

The flows and movements in the processes of evolution and development around individual geoparks, meant it was challenging to establish a precise starting and a finishing point for each case study. The turns and configurations observed in each case study geopark, rapidly dispelled the notion that the movement or transference of the geopark model into new regions, environments and locations can be expressed as if the policy and model are on 'a 'conveyor belt' transmitting resources or advice from one side to another (Wedel and Feldman, 2005). An isolation and frustrated geoparkian voice expanded upon this point by explaining, "geoparks are great a producing babies, but not so good at supporting the raising of children into adults" (GGN interview, 2016). Explaining further about what was meant by this metaphor, the colleague stated that the advice, documentation,

exchanges and experiences provided as policy through the geopark network, are useful at bringing new projects into the geopark 'family' (UNESCO Global Geoparks, 2016). But the formal documentation only brings a project to the starting line. Once established, the coordination team soon encounters the challenges of sustaining a geopark and how concepts in practice, do not necessarily resemble or are aided by the descriptions found in the guidelines and statutes (GGN interview, 2016).

9.2 - Theory and practice interwoven in the geoparks model: Anthropology of public policy

The movement and enactment of the geopark study cases as viewed on the ground, have begun to bring to the surface the benefits gained through problematizing and reflecting upon the geoparks model and policy, as considered with anthropological perspectives on policy. The opening out and investigation of 'what do people do in the name of policy (Wedel et al., 2005), acts as an additional line of examination in particular to the influential geopark charter and guideline documents. These have been seen to be practiced at different points and sites across the geopark locations and network events, where they continue to be presented as essentialised, discrete and bounded objects (EGN, 2015b; EGN, 2017a; UNESCO and IUGS, 2016). Although informants have highlighted that this doesn't mean they are completely untouched, as fine tuning debate carries on during the occasion of nearly every coordination committee meeting (English Riviera interview, 2014). But the geoparks model continues to remain formally about identifying, valorising, sharing and popularising geological heritage (Martini and Zouros, 2001; EGN, 2015b; GGN,

2017). Borne out of a frustration at the lack of political commitment to recognise and support that concern (Barettino et al., 2000), the model at its roots is grounded on a philosophy stating "well if government can't help us, then we will help ourselves through community driven initiatives" (GGN interview, 2016).

Based around that ethos of exasperation at a perceived lack of political will, and drafted predominantly by individuals with an Earth Sciences background, it is unsurprising that the documents and texts which have provided the foundations and signposted a direction for the geoparks to follow (Frey et al., 2001a) are rendered apolitical through delivery 'in the neutral language of science' (Dreyfus and Rabinow, 1982, cited in Shore and Wright, 1997: 9). At the point when the geoparks model was conceived, it was considered and described as an overarching policy tied to and addressing sustainable territorial development (Martini, 2000). However, no sooner had the expansion and transmission of that policy been shaped into a common network of locations, and framed by the organising charter, then it started to migrate into new situations (Shore and Wright, 2011). With the addition of new geoparks each year, the conditions and assembled partnerships stretched the founding policy documents beyond the contexts within which they are were originally formulated.

As traced in the current forms of the three case study geoparks, those backgrounds present no major clashes with the organising geopark paradigm at the network events. But at home around specific coordinating and management organisations, the geopark model is transformed through processes that bring together a plethora of alternative assemblages of actors and materials (Law and Singleton,

2014). The particular issues of governance, communication and durability that subsequently move around shifting political scenes, result in new enactments of geopark policy that do not cohere with the taken for granted definitions that are delivered by the unifying documentation (Frey et al., 2001a; UNESCO and IUGS, 2016). Instead the manifestations observed through the fieldwork in this thesis, are re-negotiated on a continuing basis, or as one geoparkian indicated, you're always required to be "fighting your own corner" (Marble Arch Caves interview, 2017b). Moving to positions where best to shape policy decisions and their implementation (Wedel et al., 2005), rather than be shaped by directives formulated through agencies that are external to the geopark consortium, becomes a challenging aspect of policy re-negotiation. Overall the questions offered and the observations taken in the field by an anthropology of the geopark policy, bring 'a critical corrective to the simplified models' (Wedel et al., 2005). But in the midst of an approach that has to incorporate an expanding network, and already complex bureaucracy both in individual geopark consortia and in respect to a network embracing national and supranational organisations, opening out un-problematized features can certainly have its limitations.

9.3 - Theory and practice interwoven in the geoparks model:

Audit culture

One essentialised feature of geoparks policy that remained central during many conversations and interviews during this research was the controlling, quality checking and measure of 'progress' (GGN, 2013; EGN, 2017a) that is conducted through the process of geopark evaluation and revalidation (EGN, 2017a). It was

explained that a significant aspect of the rationale to formulate the revalidation process, lay in the wish to make the geopark model distinctive and to learn from perceived shortcomings observed in other heritage and conservation programmes. Most notable amongst these was the lack of accountability in the processes around UNESCO world heritage nominations (Meskell, 2013; Meskell, 2015) and the subsequent maintaining and sustaining of world heritage sites once listed (UNESCO interview, 2009).

The mechanism devised to draw together the geopark policy, its charter and ethics, along with transparency and accountability was an audit style revalidation process. Firstly involving an extensive set of self-evaluation forms to be completed before the hosting and guiding of a 3-4 day evaluation mission conducted by expert evaluators (who are external to the geopark being scrutinised, but internal to the GGN), the adherence to this process is non-negotiable with the immediate sanction of expulsion from the geopark network applied if a geopark is unable to facilitate the revalidation mission. The interaction, influence and connectivity between the concepts and questions of the geoparks policy, the embedding within guidelines, statutes and codes, and the assessment of implementation and accountability through the revalidation audit, are key practices in the creation and enacting of geoparks. Comparative analysis also finds that they share considerable overlap with many of the features identified and described in what has come to be known as the practices of audit culture (Power, 1997; Shore and Wright, 1999; Strathern, 2000). Each built around fundamentally numerical and statistical measurements, involving a form of self-checking and reflexivity, being conducted

via expert evaluators as part of an opening out to transparency and scrutiny, with a setting of targets and a potential repercussion of sanctions.

Now with more than two decades of studies and engagement across diverse sectors and settings, one of the central arguments presented is how the analysis of audit cultures brings helpful insights into the strategies and practices through which institutions are governed and policies disseminated and enacted (Power, 2005; Shore and Wright, 2015b; Shore and Wright, 2015a). Placing the audit practices within the geoparks model against these concepts, it is for instance possible to view afresh the strategies that are utilised to control and govern the diverse enactments of a policy and with the aim of bringing them closer and cohering with a unifying ethos (Shore and Wright, 2015: 430). Other smaller scale and more specific facets of the geoparks audit also show up a similarity with those observed across other audit culture contexts. For instance the characteristic of a mandate for openness and accountability in performance, are typically uni-directional and top-down (Shore and Wright, 2015b). This is manifested in the geoparks audit practice, as the revalidation missions and the eventual recommendations by the advisory committee are not scrutinised by the geopark being audited.

In summarising the pool of research around audit culture, Shore and Wright (2015) outline examples representing the rolling out of a neo-liberal policy that pursues the application of frameworks of governance and control over an increasing spread of influential sectors (Power, 1997; Shore and Wright, 1999). But the motivation and rationale within the geoparks policy is certainly not

primarily guided by this agenda. Instead audit culture as practiced in the geoparks network continues to contribute towards the policy aims of popularising geosciences and promoting the importance of geological heritage and conservation whilst targeting the creation of more responsive and accountable model within the agency of UNESCO. A further area of divergence from previous studies of audit culture can be observed in the absence in the geoparks audit of league tables, lists or other competitive and comparative measures against other geoparks.

But perhaps the most significant contrast is that the emphasis of negative and undermining consequences identified in the practice of audit culture (Shore and Wright, 2015) are for the most part not shared by geoparkians in the way that auditing in the form of revalidation is received. What was observed in this research instead was a widespread acknowledgment and acceptance of the process of revalidation? Although described as involving intensive periods of work, the rallying and motivating benefits along with the leverage it can provide from partner agencies were both remarked upon by informants (English Riviera interview, 2011b; Marble Arch Caves interview, 2016; Katla interview, 2015b).

9.4 - Theory and practice interwoven in the geoparks model: Exposing obfuscating dichotomies

One further corner of public policy which anthropological scrutiny has been opening out and providing a counteracting argument is in the use of dichotomous frameworks. As with a number of other terms encountered and utilised in the framing geopark policy documents and debates (such as 'geotourism' or

'management plans'), their use is grounded in the move to simplify and essentialise complex and often ambiguous processes (Wedel et al., 2005). The duality evoked most regularly in the geoparks model being bottom-up versus top-down (UNESCO, 2016c). As presented in previous chapters, the dichotomy was placed inside the geoparks model at the onset as the result of a perceived need for local communities to 'act up' in response to inaction by 'top-down' governmental institutions (UNESCO interview, 2009). The principle difficulty with this has been that with the migration of geopark policy the use of the dichotomy has generated another taken for granted idiom. There is now an unspoken assumption that the meaning and definition are acknowledged, shared and comfortably travel across unlimited settings and contexts.

The data and information generated through ethnographic engagement has determined however, that without scrutinizing the composition and components, agents and institutions, the forms of activity, the places and situations of convergence, then at best the dichotomy oversimplifies and obfuscates (Wedel et al., 2005: 43). At worst their application in an uninvestigated context can render a term almost meaningless. The impact of restricted engagement with the contextualisation of the use of the top-down and bottom-up dichotomy was most dramatically observed in this research around the case study of Katla Geopark. The interpretation and application to bring a bottom-up initiative to the geopark project meant that over the initial years of its development there was limited engagement with perceived top-down national agencies. But in crucial areas for geoparks, such as tourism and environment policies, national agencies are in fact the most significant and impacting in the local setting of the Suðurlands region

(Lindqvist et al., 2013), and the most direct organisations that need to be partnered with if efforts are to be sustained. The consequence of having contact with institutions as determined by physical locality rather than considering how policy assemblages are composed heterogeneously, in this case resulted in restricted access and influence around crucial resources. Fortunately for Katla Geopark, opportunities were availed to reassess that policy assemblage and make crucial connections to bring together a partnership that could engage with and facilitate the demands needed to support the geopark (Katla interview, 2016a).

9.5 - Theory and practice interwoven in the geoparks model: A philosophy of geology leading to Earthly Sciences?

Through its actions to safeguard and popularise geological heritage with a broader consequence of projecting the relevance of Earth Sciences in everyday contexts, the geoparks model would seem to be ideally placed to assist 'the neglected kinship between reasoning in the sciences and the humanities' (Frodeman, 2014: 1). The evocation of such philosophical connections however, has been less forthcoming not least because the recognition of geology as a distinct science has long occupied a peripheral position in the philosophy of science (Frodeman, 2003). Based on my observations in the different geopark locations, I believe that the processes and manner in which geology is conducted in the field have considerable bearing on how the geopark model is practiced now and what responses may be made in the future. Currently the majority of activities taken in geoparks to introduce awareness and interest in geoheritage and conservation follow the same methods that we geologists are trained in, which is through observing, reading and

comprehending of geological processes and systems in order to appreciate landscapes (Raab and Frodeman, 2002). The aspiration is that by bringing greater numbers of residents and visitors along geotrails, guided walks, and other activities there may be an increased appreciation and engagement with geology and landscapes. However, this is still the meek subsidiary analytic science of geology. It does not introduce the more radical and impacting concept of geology as having its own philosophical position. Even more significantly, the geology introduced at present in geoparks is not that of the Anthropocene, where we are moving 'from a stable Earth this décor of human history, to an Earth active on the stage of a common drama' (Latour, 2016: 2).

The argument that geology represents more than a derivative subsidiary to more hard sciences (Gould, 1987), and should instead be considered a hermeneutic and historic science most effectively understood through a continental philosophical stance, has been most forcefully contended by philosopher and geologist, Robert Frodeman (Frodeman, 1995; Raab and Frodeman, 2002; Frodeman, 2003; Cervato and Frodeman, 2012; Frodeman, 2014). The significance of that repositioning can be recognised across the geoparks activities on the ground particularly through the use of narratives and Earth stories, which are brought into assist interpretation of geological concepts such as 'deep time' (McPhee, 1981). Explanations of individual features such as Marble Arch caves, or Kents cavern in the English Riviera Geopark, to sweeping landscapes carved and transformed by glacial actions or through volcanic rifting and eruption, I observed to rely equally on the complementary dovetailing of scientific clarification and narrative cognising.

Figure 27 - A fragment of an 'earth story' as expressed at Skógafoss geosite in Katla Geopark, Iceland (Jonathan Karkut, April 2014)

For all this, the introduction of a continental perspective in training and education around the Earth Sciences is only yet in its infancy, as indeed is the philosophical debate (Baker, 2013; Raab and Frodeman, 2002; Frodeman, 2003). Instead if geologists do look directly towards philosophical questions, it generally remains that their inquiry remains directed through the analytic tradition of contemporary philosophy (Frodeman, 1995). Consequently the majority of geologists (myself included) pass degrees understanding their science to be embedded in a method that claims to be objective, empirical and of greatest relevance when viewing the geoparks charter or 'philosophy' (Madonie geopark, 2004) based on epistemological monism – that is the consideration that it consists of a solitary, recognizable group of rational procedures that are valid across all areas of analysis (Frodeman, 1995). It was not possible in this research to directly question if an

analytic philosophical position was considered whilst formulating the core documents and guidelines of the model. But through observing the linear and singular framing of those materials over an extended period, I suggest a reductionist mode of thinking looks to have been strongly influential. If geoparks were solely about geology and science, that suggestion would perhaps be less consequential. However, the common usage of an opening explanatory expression, 'geoparks are not just about rocks' (Bailey and Hill, 2010; Gray, 2013; UNESCO, 2016c), quickly reminds us that the drawing together of conservation, education and sustainable development needs, ensures the model as practiced in its individual geopark locations, brings in many more perspectives and methods than those deployed by geologists.

This indeed raises a significant debate around the geopark model, and one that has only loosely been expressed at least in written form. Whilst considering the assemblage of concerns and the philosophical positioning for a more enhanced consideration of geology as seen in the geoparks model and practice, Martini (Martini, 2009) asks is geology today 'only a branch of science? Is its role limited to describing environments of the past?' In answering this question himself, Martini considers that,

'Geoparks true conceptual originality is thus not in geology: they offer not only a reflection on time, but also challenge us to undertake an initial voyage through that enigmatic dimension. Geoparks, not just territories to teach geology, can become an experimental domain where the perspectives of the philosopher, the writer and

the artist can be integrated. Thus, rather than a 'scientific' or 'nature' territory, they emerge as 'cultural' territories of far wider importance'. (Martini, 2009)

This places the geoparks concept seeking on the one side to be conducting the role of a synthetic science (Frodeman, 2003) drawing on a continental philosophy, whilst simultaneously it is shaped by procedures in the GGN and advisory committee that appear to take their position and be locked into methods more familiarly staged in an analytic hard science laboratory.

The situation described above looks and sounds replete with heterogeneous and messy materials. The kind of assemblage that the discipline of Science, Technology and Society, through the toolkit of Actor Network Theory (Law, 2016), has long sought trace and understand processes practiced in a range of different case studies (Latour and Porter, 1996; Mol, 2002; Law and Singleton, 2013). I therefore proceeded to consider the multiple practices of the geopark model, with a further layer of analysis to examine the radical relationality of agents and materials as seen in the geopark case study locations. One area that the approach has already been seen to assist, is in the way it helps to focus on 'undoing otherwise hampering taken-for-granted assumptions' (Law and Singleton, 2014), like the bottom-up versus top-down dichotomy which brought about obfuscation as Katla Geopark sought to align with policy in its locality (Katla interview, 2015b; Jóhannesson, 2016).

Continuing throughout the case study fieldwork to view how the geopark model was practiced, a multiplicity of different interpretations became apparent whilst at

the same time each of the locations retained a consistent response to the centrally framing and influential documents (Riles, 2006) of the GGN. The objective of maintaining a central purity in expressing the geopark model, juxtaposed with heterogeneous and shifting individual enactments out on the ground in the geopark locations, echoed with what Law et al. (Law et al., 2014) have described as modes of syncretism. In the arena of geoparks, three strategies in particular are recognisable. In the form called 'denial' the approach is conducted whereby expressions of noncoherence are rebuffed and is identifiable in the revalidation process that issues yellow or red cards where sites veer too far for the proscribed practices. Secondly an approach termed domestication can also be observed in particular geopark actions. This is where noncoherence is acknowledged but accommodated by means of training and guidance, such as seen in the organisation and scrutiny of geopark national forums. Thirdly there is a form of separation. In this strategy potential areas of noncoherence are kept apart, for instance through isolating of particular tasks, personnel and function or spatially through locating certain activities in one location and other in a different locale. The overarching achievements of syncretism are to endure a mixture of both pure and messy practices, in this case the practices of geopark policy. For now the tolerance and strategies employed across the geoparks network have endured both/and in most circumstances, but it remains to be seen if those strategies can hold as new geopark contexts move the boundaries of what may be perceived as being coherent or noncoherent.

9.6 - What future research directions around UNESCO Global Geoparks?

This investigation of geoparks policy as practiced in the geopark territories has helped to unpack a series of taken-for-granted suppositions and flawed dichotomies (Wedel and Feldman, 2005) that have been holding together or perhaps holding down the geopark model as it is reapplied in a growing number of localities. The three case studies outline what has been described as a "continuous juggling act" (Marble Arch Caves interview, 2017b). At the centre of that performance is a consideration of governance and which assemblages provide the space and adaptability to sustain the concept in each locality. There are now well over a hundred geoparks and each I believe demands further research to provide views of where the model coheres and the breadth of regulations that may allow the individual interpretations to rise.

One specific corner of helpful investigation I believe lies in the dismantling of the misleading dichotomy insisting on a simplistic bottom-up versus top-down opposition. The model is formally situated inside a global intergovernmental organisation in UNESCO (UNESCO, 2016c). That functions through a bureaucracy supporting state entities in the Paris headquarters of the agency and connected with UNESCO National Commissions in the member states (Meskell, 2013). At the level of the individual geopark consortia, policies presented or delivered at a 'local' level when scrutinised closely may show national or regional influences particularly when fundraising and sustaining of resources to keep each geopark functioning, demands lobbying, effective communication, engagement with budget holders and consistent methods for 'fighting your corner' (Marble Arch Caves interview, 2017b). It is not helpful to think of a geopark as a bottom-up initiative.

Research into the hybrid policy assemblages around geoparks, and not via single linear transmission of policy, is the way to move forward.

A further profitable direction of research could also be towards looking at case studies in developing areas of Africa and Latin America where geopark projects have initially taken root, but not emerged successfully in their application to the GGN and UNESCO. Following the approach taken in the English Riviera, MAC and Katla, it would be beneficial to again avoid the dichotomy of 'developed' or 'less-developed countries', but to think around the position of civil society roles in different regions and asking if there are there opportunities to engage, sustain and be treated as partners (never mind equal partners) with governmental agencies. Thinking around the construction of management plans, which partners, or individuals have the legitimacy or capacity to participate in those types of process? Are there alternatives to the funds from the European Union that proved to be essential in building the geoparks model in a European setting. And what of the strength and positioning of the Earth Sciences in destinations around the globe? Further questions exist such as how is geology meeting with local communities? And are those engagements positive or equitable and if not how may closer understandings evolve?

As a whole, this thesis has suggested that geoparks are a useful basis through which to re-examine an anthropological perspective on public policy. The analysis shows too that the geopark model has the potential to be an ideal platform to discover novel ways of equipping alternative combinations, in what after the realisation that the Anthropocene era may already be upon us, is demanding with

ever greater urgency for us to rediscover the human connections with the planet ones that move far beyond disciplinary silos, academic disciplines that are 'simultaneously indispensable for training and job markers and useless for defining issues and new fields' (Latour, 2016). For that to be possible, familiar boundaries and philosophies have to be bypassed and more radical assemblages devised in geoparks and beyond.

Figure 28 - Scene from the performance of Earth Echoes GeoOpera, during the opening ceremony of GGN2016 conference in English Riviera Geopark (Jonathan Karkut, September 2016)

A starting expression or prototype may already have happened in the process that led to the creation of the Earth Echoes GeoOpera, and its thus far solitary performance in September 2016 as the curtain raiser for the 7th international conference on UNESCO Global Geoparks in Torquay (English Riviera Geopark, 2017b). On one level Earth Echoes may have appeared simply as the performance of a form of musical about the geological time, human connection to geology, landscapes, processes and the concept of the Anthropocene. The learning pack

produced around the project (English Riviera Geopark, 2017a) however, opens up a much more complex formation and one that represents a more considered form of engagement with wider audiences. The process is charted and explains how the eventual performance was built upon far more than just geological inspirations for music, sound, song and movement. Artists, musicians, performers, Torbay residents, schools, Earth Scientists, designers all investigated a common subject area and formed a hybrid gathering of agents not commonly drawn together. In this I saw an expression of what Latour (2016: 10) has presented will be required to accelerate and made fundamental changes, a convergence where a: 'much larger set of transdisciplinary skills that provide players and audience with a sensitivity for situation where there was none before'. Additionally, the learning pack and analysis of the 'Earth Echoes' process, importantly points also towards replication in alternative settings. Might this interpretation be pointing towards the type of technique, a non-didactic, multiplicity of hybrid or synthetic Earthly geologies that can assist UNESCO global geoparks to evolve fully on to a worldwide stage? The foundations of a more durable and dynamically creative process to investigate and inspire how 'The Rock Connects Us'?

Businessperson in MAC Geopark March (2017a)

Transcript of interview with Brigitte business owner

J With regards to help or training on the geopark, was the session you had a one off?

B No, when the geopark was first launched we went down to Slieve Russell where they had a geopark launch event as it was open to everyone in the area really, to give you information about what it was all about. Since then I've not been to every one, but a couple of weeks ago there was another involving the geopark and what was going on and how they were trying to improve things

J Was this at the same venue (as the previous event)

B No it was on at the market house in Black Lion.

J The tourist office?

B Yes, there is a room above it so the had a meeting of info about the geopark and just telling people about it. And there has been organised trips to go around the area, I think Eleish organised that - I think it was on Friday or Saturday so we didn't go on that as its not a convenient time for us as we're busy

J So that was for residents and businesses

B Yes for local people to know about what the geopark's up to. They get a lot of visitors the geopark don't they - 200k or something!

J Obviously the easiest thing numbers wise is the caves they know how many people are going down there, but the wider area it's a bit more difficult to keep tabs on

B We've only had a couple of people directly stayed with us, some American people and I took them down there. they were on bikes as it was chucking it down I gave them a lift - I couldn't get them all in the car a couple had to cycle down there (but that's another story). But when we got there it was crammed there were coaches buses the car park was full and the kind of they get there and there's just 'that'. You really need to have an inclusive all in stay in the area do the caves see what its all about go out walking come back. It seems just like a one hit and they must all come from the Enniskillen side obviously and go up. So its good for them. But Seeing as we're in the dead centre of the geopark here - I think it was they want to call it Blacklion geopark village. It was a bit frowned upon because the village it doesn't have geopark status on its own . But if you say that then it attracts people to us. But it is in the centre of the geopark and you have to play with words really. As we're the centre we could stay there.

J So who was leading the meeting you had in the market house?

B A guy from Cavan tourism. They were talking about grants for doing stuff.

J What sort of stuff?

B It was more for community groups rather than businesses

J What sort of things did they want to get them involved in.

B Eiliesh round at the enterprise centre she also brought it all together as she's West Cavan and Fermanagh so she'll be able to tell you all about it as they've got it all written down

J But was there anything in your mind and you went yes that would be useful to get onboard that

B Not really see – people that are staying here are generally eating at Nevin's. You only get the odd one or two who come early (before their meal) and so they have to go for a walk and ask do you recommend anywhere, is there anywhere to go? Or we say to people are you going home now (back to Dublin or wherever) well do you have time to go to Florencecourt House or to Marble Arch Caves that's just like on your way home . So other than that there's kind of forests and things overlooking Loch Earne and are fantastic, but people coming up from Dublin would probably get lost trying to find it. So you've got to keep it quite local

J Or come up with better maps and better signage

B Yes, but then again it's the time factor. People say we'll just go for a walk before we go home and walk off breakfast. So perhaps they only have an hour out. But then again if you got people to stay, and made a weekend of it , or a half-day or whatever, then you could get them to go out further and see more of it.

J At the meeting did the talk any more about the sites that are on the Cavan side of the park?

B Yep, she had a map that was like that's why I know that Blacklion's kind of dead centre, but its kind of all around us. Yes it certainly did involve Cavan. Like the Burren which is just there (pointing up the hill) but we've never even been there (laughs)

J Do they intend to have similar meetings circulating around the community in different locations?

B I'm not sure really. Eileish she'll tell you. But Jim, yes we used to go on the what they call the Cuilcagh walks – there's a group that used to go walking every weekend before we opened here (they used to run a butchers and other businesses). And Jim's fantastic. We're looking at a field with rocks in it and Jim he's saying well this was once a building and they moved over from there…you know great knowledge. And those business cards they were in each room and your's is the only one left as the others have been taken and we do say it on our website that you can arrange walks for groups and jim will take people out

J Have you felt that business has changed since geopark status?

B Well the recession is biting hard. And the weather as well this winter has been appalling. The weather did cause a dip as people couldn't drive over. But no I

don't get many people staying over here and telling me they're over here for the geopark

J So its not quite got through to the public yet?

B No, no. I suppose they've got to go further afield. I know they've got a website and these days that's the way to communicate to people isn't it to get your name out there. It all depends on what you're interested in I think. I mean we'd never heard of a geopark before we came here – although there's places in Europe already set up and running but in think we've got to make more of it to get awareness out there really. Though I mean its young this one isn't it?

J Certainly the cross-border element of it is and I suppose part of the task is to get it to feel like there's local involvement in it

B Well that's right it should be a spin off for the whole area North to South , East to West in the geopark. It should be about people staying on in the brink and moving in and moving out again . But for me personally we don't yet have people saying we're staying here for the geopark

J You said that was one of 5 or 6 meetings that they've had you've been to?

B Yes, they had this launch with everyone in the area , we got an invite so we went. But there was one up in the resource centre (Blacklion)

J And they tend to take a similar sort of format do they? About telling you what's been happening. Do they invite you to exchange ideas

B Oh yes, there's a Q & A session and

J What do you feel if anything comes out of that? Does it sound like they're listening?

B Well like I said , the last one involved information on grants but as it didn't really involve us I kind of switched off . I don't know where else meetings are going out to , you'll have to ask them I suppose

J It sounds like they'll have to continue to do that talking and maybe come up with different types of events and different types of cooperation. Did people stick their hands up and say that makes sense..?

B Yes there was a few questions

J And you got the impression that there was interest in that grant type scheme?

B Yes, for some people. The meeting was informative and its good to know what we're up to and how its going to be reviewed and how its got to be maintained and all the rest of it

J Hopefully in due course..

B Well they say its going to be big and bring in a lot of people. But its just waiting we are turning people away and saying we can't take you in – well I wanted

to get in the geopark, but at the moment its not happening. Well I suppose it'll take time. And with the recession people just aren't travelling

J And how do you see other businesses in the village connecting with the geopark?

B Well during the boom years of Celtic tiger there was a builder who built the substantial building and also some other houses locally. He then rather than focussing on one business set up a supermarket, another couple of different shops. These all failed – due in my mind to the lack of quality and business understanding . He was trying to spread his bets but ended up doing everything poorly rather than concentrate on doing one thing well.

J In your opinion, what ways is the village connected to the other aspects of the geopark?

B Since our initial introduction to geopark, we've not really been involved in any further training or interaction. The market house itself is a good community resource and is well used. It's now got a lift to the room upstairs. It used to be the old courthouse and has even still got the judges bench. They have dances there, also clubs and a number of other events there. But Blacklion is supposed to be the centre of the geopark a sort of hub. But i feel the honeypots like the Caves get business whilst routes, trails, pathways don't create hubs unless there is a good reason to stop and stay at a place. I can compare our situation with that of another café business we know in Newtown on the coast. This is in a sizeable town, and her business took on 5 or 10 times trade when the Wild Atlantic Way concept was marketed. Think about a focused marketing strategy. The result of that concept was that it puts the place in the public eye and mind. But not alone, they require a concentration of services and a business knowledge to support the initiative.

Gets called away as he's needed in the kitchen – interview ends.

English Riviera interview (2011a)

Interview with Jane in English Riviera Geopark management team August, 2011 - section I

J So what do you want to learn then?

JK What's been going on this year. The focus is with the ERTC it was just coming in to being when I last saw you. So I'd like you to give me an annual report

J The ERTC. So its been going for some time now. Because it was October 2010 when it started. And its quite good really, its focusing on destination marketing that's the key focus now and funded by the Council. But that money is being channeled now less on wages and more on actual destination marketing. There's still a I suppose a conflict between you know is an event in the area something that is, does that bring people to the area and therefore should it be funded by the ERTC , so if we take for example the Brixham pirate festival you know is that something that the ERTC should be funding or is that something that the organisers need to get on with it, but the ERTC certainly could mention it in a, promote it, or should they be putting money in to it. And then you have this slight conflict when the ERTC itself has no role in terms of event management. So it doesn't do road closures, in terms of health and safety side of things you know, that's provided by the Westfare Manors and vistor services that provide that side of infrastructure. So the triangle of support is there but the ERTC is purely on the destination marketing and that's quite useful because it means you can just say look sorry, is it going to bring more people to the Bay, No? well then we're not interested. And that's why the geopark is a big focus of what they do because its very much about using the natural environment to attract people to the area.

P Yeah I've given Jonathan the leaflet

J There's a package that gives people a reason to come here. Up until now most of the people participating in those packages have been local people and we haven't really seen the power of it driving business into the area and that's fundamentally because the website that the ERTC has got they haven't invested in that – they spent their money on guides and this year coming is the year for the investment in the website. That's when we'll see a much better link through of packages being advertised on the front page and drilled through your ability to book it and driving it through.

JK What's the url for the ERTC website?

P www.englishriviera.co.uk

J So that whole website will become much more alive and the ERTC of course has to find a source of income. So one of its sources of income will be commissions and from tickets sales on events and activities. So the ERTC over the next six years has got to find theoretically a completely different source of income to replace the grant it gets from the council

JK Is that grant being gradually stepped down?

J Yep its being stepped down. I think in reality it will never ever be able to replace that support that the council gives. It just couldn't. The amount of money needed to invest in that sort of thing is huge

JK One of the things that you mentioned before is that they've got to be reporting back on achievements and that the council is seeing where that invested money is providing results?

J Yeah that's interesting actually because the council by commissioning out this service they've basically said 'we think you the ERTC a body we are commissioning we are using to deliver on an agreement in terms of destination marketing, we think you can do it better and more efficiently and therefore we are going to give you quite a lot of control and autonomy in doing that'. So the reporting back is, clearly we're talking about public money but the agreement was that they would give this company this amount of money to deliver, so that's the sort of agreement. The council owns that company, owns ERTC outright and it consolidates the results of that company into its own accounts. In terms of audit and everything else its all subject to that sort of rules and regulations. So it is exposed and it is public money and we're fully aware of that and therefore we can't be seen to be favouring one particular attraction or one particular group of hotels. And one of the big driving forces behind it is to establish a network of promotional partners. So small guest houses or hotels, big hotels, small hotels who put money in to a pot and see that money work twice as better or three times as better as it would if they tried to buy the services elsewhere.

JK Particularly through the website as well?

J Yes, but its been interesting as iwe've had a change of administration the Mayor, a new Mayor has been elected and the new Mayor doesn't particularly like the old Mayor and so anything the old mayor did you know needs to be taken apart. And one of the things the old Mayor did was to create the ERTC. And so at the moment there has been a little bit of 'oh the ERTC is it really delivering' rather than focusing on destination marketing and how we should spend the money its we're all on self defense now and its absolutely crazy and all a symptom of the mayors move. But you know the mayor has got to question these sort of things. And there are areas like events management thing I started off on is exactly an area of weakness and should very definitely be run by one organization. I mean the trust puts on events at Occombe Farm and uses the services of the council, but it needs to promote that event through the ERTC. Brixham pirate festival is an event that needs coordination with the council but it also needs to be promoted so there are lots of things if we actually worked together we could actually be a lot better at and we would, there wouldn't be conflicting events on the same weekend

JK Yeah the thematic thing

J But that will only happen if we all sit together in a forum and of course we dream that that will be the Geopark that will do the whole thing and bring the whole thing together

JK How often does it meet then the ERTC board?

J Once a month. Yeah once a month and its got its chief executive employed and all the directors are private sector and there are appointed members from the

council who are on the board, there are two. The other private sector members don't necessarily represent any organization they just are on the board because they're enthusiastic and they've got a bit of passion about wanting to make it work. The current Mayor for example is quite keen to see that the members of the board are made up of representatives from sectors within the community. So he'd like to see representatives from the Yacht clubs for example down there, he'd like to see representatives from the fishing industry, representatives from the accommodation providers. So they would effectively be the chairperson or the nominated person of the organizations that manage those agendas

JK That group

J Yeah, so they may not necessarily therefore be the most passionate people but they may represent their members views. yes so and so said this and you get into that sort of stuff and it's all very important buuut it doesn't really help to, sometimes you have to say now come on guys lets do it this way and it's the right way and we all know, But you can't do that can you . so there's a bit of that going on at the moment. So the ERTC is doing really well and its getting a lot of respect, a lot of respect across the country actually as an organization that's the only example of it in the country – an organization that's funded by the council but that's run by the private sector

JK So I presume you'll be going up to World Travel Market then in November?

J Berlin?

JK No World Travel Market in London

J Urh, I don't know, I don't think we'll go back to Berlin actually

JK No?

J Because even though it was quite a good stand we had there, actually the business that was generated, you know millions of pounds worth of business was quoted, you know whether that business is

JK Could be achieved by other means?

J I think it yeah it could well have been actually, so it's a debate as to whether we go back

JK Back to the ERTC

J Since its got going it has achieved some amazing things. I mean its cut the costs down, we've stripped it out the council. We've cut costs back we've saved you know hundreds of thousands of pounds from their original budget. And we've focused totally on one area which is getting people to the resort. Whether people have come as a result of our first nine months is always very difficult to judge. And that's one of the areas we're investing in the market research to actually

JK So is the market research done internally or is that then outsourced?

J No its outsourced to a professional company, so they'll be looking at

JK Source markets?

J Yeah and the guide book. Because the main activity we do is put out an accommodation guide which has all the hotels. And the people that are sending that are monitoring the bookings and enquiries that are coming through. So that's quite a lot of redemption data that they are trying to gather. So we'll see. Um and also just generally do people, is the English Riviera, is it Torquay, is it the hotels or do they come here because

P Or is it because it's a bit warmer than anywhere else in the country

Jk It is today!

J So they're looking at how we ought to be promoting outselves. We've all got this romantic vision of what things here should be like, but its important to always question the research on why people don't come here in the first place

JK Have you had that sort of research in the past or is that something that has been an outcome of getting this ERTC?

J Well I think that's something we've been looking at, because we've questioned all the time on our performance. And now we're looking to justify this route. Why we're saying South Devon's beautiful bay for example, it's a strap line that we're currently using. It's the English Riviera but South Devon's Beautiful bay because English Riviera is a bit oh god

JK Ok

J Where is it Newquay somewhere like that? You know South Devon's beautiful bay ok I know where that is – but that's for a domestic market I'm talking about. For the English Riviera I personally believe, and this is no back up in any market research, but I believe the English Riviera is a fantastic name for the overseas market, because it absolutely nails it on the head, where it is, what it is, and somewhere you might want to go to. It's a brilliant name for the overseas market because its new and its exciting. But for the Brits its all a bit, well the people that come here, that are the people who've been coming here for ages and they know, they think of the English Riviera ha ha, it's a bit of a joke it's the English humour, you know its very amusing

JK It rains quite a lot

J But I think the other thing about the English Riviera is that we're looking at it as a year round attraction a year round place to come. And I feel we spend too much time pretending its somewhere that actually everybody knows it isn't. so we try and say its got the best beaches in Britain, Its got fantastic weather, you know it's the Riviera lifestyle, while its not really in the Summer because there are some other places that are just as nice in the UK. But I tell you what, in the Winter this is the place to be. You know out of season you can walk around in a t-shirt on Christmas day here. That's when people are surprised. That's when if you walk around the harbour in Christmas day and its like 12oC and you think wow this is lovely you know and that's when people do go this IS the English Riviera and that's all year round business. But the market research is looking at and saying well actually, the hoteliers will tell you that you come here but you book your hotel first and then look for some things to do. The attraction operators will tell you that no that's not true, people will look for things to do and then they'll book a hotel. So

there's a big debate as to who is the most important. I think it completely depends on the age group you're in and who you are.

JK With my holiday last week we booked the accommodation we like going to this particular area so we do that first and then we look around – also you've got to play it by ear with the weather and then think about what you're going to do once you're there

J Yep so there's a bit of both. What came out of the most recent survey that's very interesting is that the English Riviera is very good but actually guys you are probably the best of British. If you are thinking of a place to go in the British Isles there's probably not a better place in Britain to go to if you want a really good holiday because you've got Torquay and Brixham that's nice lots of going on, night life and all the rest of it, nice restaurants, but the hinterland as well, you've got Dartmoor, Saltcombe,

JK Jurassic Coast?

J Jurassic Coast, there is no other destination in this country that has got that kind of offer and therefore it is just about the destination and you've just got to start to promote it. Because at the moment we use there random pictures of these people running up from Hopes Nose and looking like they're having fun but what we're not showing them is a lovely picture of Dartmoor with sheep and long horned cattle up there, and that's the kind of thing that people say I'm going to see that whilst I'm holiday right I want to go there. So the research right now is showing that particularly in the next year and the Olympics 2012, the Queens Jubilee as well, its very British and this best of British is a real theme that is coming out. So I wouldn't be surprised if you see the palm tree logo as a union jack next year because that could be quite

JK Whilst we're particularly thinking about the tourism side of things, I wonder if you've got any thoughts on geotourism. Especially after you've just had your revalidation and I guess the word cropped up in the questions there – what do you think about it? does it help as a term?

J Do you know I don't think that word is in that revalidation form

JK Isn't it? Because its mentioned quite a lot in the original application, or some of the language in a lot of the conferences and certainly on the website it says a driver of development through 'geotourism'

P I don't think its there do you know. There's sort of like an integrated approach to tourism and mixing your geology with your culture and your heritage

JK Right, that's emphasized on the questions?

P Yeah I'd say . I think so

J I don't know, I mean

P It's a bit of a made up word though isn't it? It just doesn't mean anything to the general public

J Well Mark has got it bang on really when he says who in their right mind is going to book a geotourism holiday. You know maybe one in a million, might go ooh yes please. But the reality is you don't go book a geotourism holiday. You book a holiday

P That's got stuff to do, a nice place, an interesting place

J I think it's a word that's used to describe a particular

P Its an academic word isn't it? it doesn't get used by the general public at all

J No, absolutely not

P It wouldn't be a word that we'd put in our leaflet

JK Is it still mentioned at EGN meetings, so for instance in Breacon or even on the committees do they talk about geotourism, was there a committee on geotourism?

J Erm I don't know

P No there was lots of discussion about starting an intangible heritage group

J Yeah that's right there was

JK So not even at EGN. That's very interesting

J Well I think it's the evolution of it all – it's the evolution of it all, but I think it's a term you can use can't you to describe a very specific

P well our packages are geotourism

J Yes

P And in an academic presentation type way you could describe our packages as geotourism. Its an activity that includes a bit of geology and interest and you know a bit of information, but you just wouldn't go out and say ooh would you like to do one of our geotourism packages. You just wouldn't. They're discovery packages, they're exploration packages

J But there's no harm in having people like Ross Dowling focusing on a particular area of tourism that as far as he's concerned is completely dedicated to the geology of the world and there's no harm in actually thinking that could we develop something that's linked to, very much linked to the rocks, so I think there's nothing wrong with that. Out of it I'm sure you develop aspects of a holiday that could be quite interesting

P I don't think it fits the geopark concept. The geopark concept is too broad

J No it's much wider than that

P It's not just geology and that's something we're always discussing

J I'll give you a really good example with this Portuguese team last week, where they were saying we're doing coastal, coast is the theme so we want lots of pictures of the coast. And I said I've got you down to go to Torquay museum and

they said woooh what are we going to do there, and I said you're right we don't want to go to Torquay museum, I didn't want to take them there because it was going to be deadly anyway, but they went no no we want coast. And they wanted to show the link to communities and the film's got to be about coastal erosion as well and the impacts of climate change. Ok we'll do some of that stuff and we'll take you to see pictures of houses on tops of rocks and looks like they're about to fall in but they're miles back from the coast, but it looks like they're about to fall in and we'll get you some good pictures for that. And then I said we're going to take you over to Cockington Court which is a lovely sort of old country house. And this patch of grass like this and they've got this really nice artwork that's called 'The Cloud' and they said ok but what's that got to do with coastal, and I said its all about connecting, its about moving people, its about

P Community involvement

J Community involvement, ok I'm not sure, and I said you'll love it absolutely you'll get it when you see it. So this guy he's pretty supportive of the geopark generally. Anyway all it is, it's they are about this far apart huge great willow sticks, bare sticks you know starting off that thick in the ground and they've planted them in the ground so you can't get them out they're cemented in

P They're not cemented in! they're just buried deep enough

J Yeah deep enough so they won't come out

P And then covered in mud

J And then covered in Permian mud

P By the community

JK Nice red rusty

J On his phone, so ok guys what do want to know. And they go right well we just wanted to talk about the community involvement. Ok here it is look at it isn't it fantastic look at my cloud. Anyway then he moved in to the whole sort of spiel as to how it all connects and he talks about the greatest change in modern history to our lifestyle was when the Victorians introduced sewerage treatment and sanitation. And that was more than any medical advancement, it was simply that movement to try and sort out sewerage. And the next move will not be about doctors and medicine it will be about getting people active moving around, travelling from space to space giving them a reason to move. Trying to draw them through without subliminally making them move effectively. And of course this thing makes people move through it and its all about shaking sticks. And they all get involved. And that's exactly as Pete's saying, that geoparks are exactly about that, they're about saying, they're not about protecting the rocks, that's what world heritage sites are about, a WHS protects that environment and makes sure it doesn't get ruined or trashed. A geopark makes people get involved, do it, get stuck in and really feel they belong and its theirs, and its and they want to look after it and they don't want to trash it, that's what a geopark does and its absolutely right and geotourism is not, it hardly fits.

JK You've worked your way through this and arrived at that position – are you a reasonable reflection of the EGN?

J We are I think, I think we are the closest geopark to what the, the documents say this is what a geopark should be, I think the English Riviera geopark is probably the closest example you can get of exactly what a geopark should be. I haven't been to another geopark yet that comes close to what's on the paper that says this is what you should be

P I think actually the revalidation process highlighted how well we do it as well

JK Right so if English Riviera does stand out does this mean isn't part of the aspect of the network to ensure that you've got a more level playing field and everybody gets it. The interchange and the exchange and the intention is that people do it…

J Our way

JK Slightly their own way but what you want collectively is to have a common model

J The problem is, the problem is that geographically we are absolutely unique. And I think that's what gives us the strength is that we're such a small place where we all know each other we can all talk to each other, one of us goes awol you know we can sort it out. You know if the Mayor does something daft we just pick up the phone and go…'mmm actually you know' I think we can be in control. Whereas in these other community areas they are national parks that become geoparks, they're uncontrollable

P Some of them are huge. how do you possibly manage that and get consistent signage and consistent message and it must be so difficult

J So we have a huge advantage there you know and not every geopark can be our size. We are perfect because of our size. And if we were larger

P I think one of things we'll be pushed to do is spread though

J Yes yes

P Which I don't think we should

J Because the partnership suddenly changes and if you go in to Dartmoor you start working with a national park authority who come from the old school probably

P Yeah and don't want to have the logo on their signs

J Yeah old Mark is a good example - the geopark you know its an extension of their geological team and its justifying the geological section inside the protected area, and rightly so. But you know we didn't have any of that, we came, we weren't a national park that became a geopark, we weren't anything that became a geopark, we were just an authority with an agency that looked after the trees and the natural environment and we said err actually that would be a really good

designation for us, and I think that's why its worked well because we've created our infrastructure around what was already there. Sorry we've created a partnership infrastructure around what is already there, whereas the others have just bolted their existing structures so some of these guys run their national parks, oh now I'm head of the geopark so I'm gonna talk about geology but I'm still the head of the national park. So its tricky then, so I think there is that conflict. But it will change as bigger and bigger places and more and more places adopt the geopark approach as we go to America and American sites come onboard. They will bring in a different approach to the, to what's happening.

English Riviera interview (2011a)

Interview with Jane in English Riviera Geopark management team August, 2011 - section II

JK Thinking about the re-validation process do you feel that was giving a realistic presentation of what happens within the geopark? Or does it feel like a stand alone and we've got to jump through that hoop?

J Yeah, you've obviously focus your energies on that one or two days that they are here, but we showed them sites that anybody can wander up to, you know you don't do anything special you. In terms of visibility of the geopark, I mean no geopark has fantastic visibility, so there are a few gateway signs you know millions of visitors see every year, which you want them to see. Like you came on the train today, if you had driven in you would have come past a lovely sign that says 'Welcome to the English Riviera Global Geopark' but you didn't see that because we don't have one at the station because of reasons – we don't own the land there and the stations they don't want to do it blah blah blah, so where we have the land we pay for it. So we've got a halfway house. So it'll take them past that sign purposefully. So you do a bit of that, but I don't think you lay on anything you wouldn't normally be doing. Kids activities, activities relating to the geopark, it was a pretty genuine offer for what was happening.

JK But you feel possibly of the geoparks, you mentioned that you think you've got possibly the best fit to the model

J Yeah I think so

JK So if I asked that question to other people they might not quite see the overlap..

J Between the revalidation and the everyday

JK Yeah between the revalidation which is actually positioning yourself within the model, and what the activities they really get up to

J Yeah I don't know, I think the thing about our geopark is its not necessarily about fitting with the model, its more about a geopark should have a connection between the geological landscape and the people and there should be activities in the geopark that demonstrate that. And I think that's where we are very strong because we have a lot of the stuff that we have done recently, the development of art projects have really been lead by the geological roots that , which is quite easy here because of the geology we've had some well known scientists in the area in the last 200 years, and so there are these little links that we can hook in to and then once you've gone to one scientist, well you just think well there's Frood for example who came up with the formula for the speed of a boat through water, which is related to its hull, and he was a crazy scientist that lived in Torquay and he came up with this fantastic formula that could work out what the maximum hull speed of a boat is. its just a link in through to the scientist working in the area and I think its quite easy for us to have all of those links, but the arts guys and the links through to the projects its quite a nice, oh that's a different way of looking at it, so the geopark creates an umbrella a theme that everybody can associate with and of

course it creates that theme for funding projects as well. I think the funders realize that you know if we say oh 'hey its Torbay council we're looking for some funding' hmm ok fair enough. Or 'Hey its Torbay council did you know we're a European Geopark and actually this project's about connecting' its then oooh, ok that's useful and it all fits then. The geopark becomes the catalyst for making it all happen. So I think that's where the fit is and that's why I think we are a very strong, whether you go through the model, what's your management structure, what's your budget for next year you know, that sort of stuff we can't do that whereas a national park can. A national park will say (plonk) here's our budget, and that's the geopark budget, by the way it's the national park budget as well because the national park budget is the geopark budget. But we can't do that because here's 25 grand that is here for Mel and that includes the travel (laughs) you know so its my travel as well as hers. That is our budget for our geopark, we're just using other hooks and other bits in there to try and make it bigger. One day we'll get the funding.

JK How does it feel then as to position you in the bigger family of the geoparks, does that relationship what does it mean to you now as well? Because you are comfortable in adapting the model locally but what about because of ongoing commitments to exchange and to link up with other geoparks and whatever. Do you feel that's difficult to work with?

J It's difficult to work with it within the constraints of our administrative structure for example. Everyone else is volunteering, as they are using the time in their own jobs to contribute towards it. So obviously the more exposure we get the more popular we become, the more 'I must go to the English Riviera', the more strain it puts on all of us as none of us gets funded and paid for that. So the people do stuff, its ok fine to begin with, I'm happy to give my time because it was a good project, but now quite frankly we need to be funding it. People like our Professor of Geology probably needs to be paid at least for his expenses to come and speak to the Portuguese film crew. And its like well yeah hang on I haven't got any money to do that. You know (laughs) it's a limit as to how long do you keep saying ok I'll do it because I fancy being on Portuguese TV, so we're relying on that the whole time. Then it comes to a point where he'll say well frankly I've got better things to do. I don't need to keep seeing you unless you want to pay me, I'm a valuable resource if you tried to pay for me commercially it'd be a thousand quid a day thank you very much.

JK Is that the sort of, is there that type of discussion going on within the EGN meetings and so on?

J No no. You need to ask that sort of question, because we are all very much and I think a lot of the geoparks in the UK work like that as well. I mean the Loch Arbor geopark, Forest Ffawr is a national park authority so that's safe, but Loch Arbor and the one in Southern Ireland the Copper Coast you know they are absolutely volunteers that just do it in their spare time and there's no budget for it really apart from the odd bit from the local authority. And I think that's where, the single biggest question you get from councilors, I get from councilors is 'hey that geopark's great but is there any money in it for us?' – you know what do we get out of it? Why is their money? I don't get any money from it I do it for other reasons because I think its fantastic for the bay to promote it. But I think you know if you're a councilor and you're looking at it and you're thinking well is there any point

being a geopark if there is no money coming from some central body that helps fund. Well there is money because indirectly we're using it to fund, to draw down funding in all sorts of places. So there effectively is money but there isn't a direct handout from UNESCO saying right ok here's a small fund to…

JK Might that be an area of development?

J I don't know how, I don't know enough about how WHS work whether they get funded centrally? But I don't think they do. I think its all supported its just done by the local authority. So um, but it may get some support in terms of you know funding conferences and they may actually get money available to attend some of these European conferences and world conferences that they do. So I think um you know I think we locally need to be looking at our geopark and now we've had it for 4 years we need to be really recognizing its benefit and putting money in to it. Talking to support it and I think that's what I have to do what Mel has to do, the geopark organization has to do. But a successful revalidation we've just had is really good for us.

JK Yeah leverage?

J Frankly the yellow card would have been quite good, I would be quite happy, well we don't know we may still have an orange card (laughs), but urm we won't know till September. I from a strategic point of view I would have been quite happy with a yellow card actually because it would have brought focus on to the geopark by, it could have brought the debate forward about you know if we just get a green card, oh that's brilliant that fantastic what a place you know, oh well there's no need to worry about it because Peter and his team sort it out. But anyway I think we do need to bring some structure in to it anyway, and we've got to do that with the Torbay coast and countryside trust, just try and establish a decent pot of money to keep it going.

JK And thinking about the exchanges do you feel its a little bit one way and you can't visualize such great benefits from seeing the geopark people in from other sites?

J Well you know I think that's probably true, if we were a bit savvier you know a bit better at European funding opportunities, all these projects are funded by European funds. I think Britain generally is just not particularly good at drawing down funds whereas the Europeans are experts at it they know how to do it they know how to play the game and they are very good at drawing in the money. In fact we've got a project at the moment to try and look at the way the town does draw in European funding and we could be drawing down more money frankly. And that would help to fund these kind of exchange projects as well as soon as we get a project off the ground which involves a European cooperation project then we're off you know. They we're sorted really. But no I agree there's nothing, it is we are helping the network but its difficult to suddenly say lets go to Vulkan Eifel and see how they do it over there. Let's get Peter going to see these places.

JK Or this thing with Hong Kong, we spoke briefly of that last time as well, it was quite exciting when they came over here because there was possibilities, you know they were saying well look we've got loads of money in Hong Kong why don't we do a joint project. Do you think there's mileage in that relationship?

J Erm I think so, I think we might have served their purpose. The reason for establishing this network was for them to be seen to be cooperating in Europe. Once they're in they don't really need the partners, its nice to have them, its nice but frankly that partner needs to be putting something in as well and I think even though they've got loads of money they're not going to be giving us money, you know we need to be coming up with project where we pay for our bit, they pay for their bit and you know they may pay 75% of it, but they ain't going to fund 100% of a project for the benefit of urm, so I think frankly its embarrassing to expect them to really and I wouldn't want to pursue that really, it would be wrong to take that further. Yeah so we are in a vulnerable position through the lack of funding that we have to support this and our activities, so how we grow that I think UNESCO is the answer. You know when UNESCO wakes up to the fact that they've established something quite special, and they realize that the geoparks that exist have got massive potential, but that potential is only going to be released when UNESCO starts supporting it and saying wow English Riviera Mr Mayor you are one of the privileged world community because you've got your geopark status, well done you know. That's not happening there's nothing there's no communication between UNESCO and that, you know we're constantly, we spend our whole time championing the global network and then explaining what that is and then explaining that we're one of those members and what we do and if we didn't have to do that first bit it would be a hell of a lot easier for us all round.

JK Do you feel that the wider network, particularly EGN gets, has any role in negotiating and evolving that relationship with UNESCO? Or is it down to a few people, sort of gatekeepers that…do you think its down to a few individuals does the network have a role in that do you think?

J Urm I think urm, I think its very difficult because I think the network tries to have a role in that. I think that some of the country members are trying to do that we're establishing these new forums, these country forums where…

JK So that's a sort of a conscious drive now that we'll each have our national forum from Spain, Greece, France everywhere

J Yeah yeah, the European network is very much trying to establish a country forum and the reason for that is to channel applications through. Because at the moment 2 or 3 applications, they'll only consider 2 or 3 applications per country per year, which is a rule they sort of set themselves and they, but they want the 2 candidates to come forward its difficult for the at the moment the central EGN has to accept the first two past the post that come in the post that year. You know so if there's two in from a country then its ok we'll take those two..

JK Regardless of how well thought through they are

J No if they fulfill the criteria you know they submit by filling in this form then that's in and they're registered and they're in the process. Now that's fine but if you get an absolute crack one through that's really rubbish, then you won't know until its been evaluated and looked at and everything else by somebody, that actually it's a load of rubbish urm so that's a very difficult process. So what they've decided to do is to try and channel them through and channel them through the country network, so the country will say well yeah these two are good or we'll put forward these two and the risk of course is that once one is in and then it gets

evaluated and then oooh no its no quite ready yet, you've got to do this, they're still in the process so one could block up three years, two or three years you know and then we have some really exciting geopark sitting back there that's trying to get in but can't and they say oh stuff it I'm gonna try something else. So that's why they're trying to do it. And that's one reason, but the other interesting thing is of course that UNESCO has a UNESCO commissions that work on a country by country basis. What's quite interesting in the UK of course is that UNESCO works on a UK basis, it's the UNESCO Commission for the UK, so its not the UNESCO Commission to England, Scotland, Wales and NI, so therefore but of course the environment agencies that support geoparks, Natural England, Chador in Wales, and nature conservation within Scotland, you know they are working on a country by country basis with different remits and different funding streams and everything else so that's quite a different angle as well, so that's for us just a specific one for us, one of the complications we've got for our UK forum. And then you get this problem with Ireland, Northern Ireland and the Republic and of course Marble Arch goes across the border so they want to be part of that Irish one but they also want to have something to do with the British one the UK one.

JK Have the best of both worlds

J So I think and whose driving that, so those forums are driving that through to the UNESCO commissioners

JK So is that part of their remit, so as well as filtering the applications and streamlining the application process, its also being a channel to the ear of the national UNESCO office

J Yes of course, because at the end of the day UNESCO, an application has to come over with the support of the UNESCO commission. So if you apply to be a geopark you have to have a letter of support from your local…

JK Did you have to do that for your application years ago?

J Yeah yeah, so that's happening, so therefore that is quite a good system to have in place, to have an awareness of what's going on. So there is a channel that way through the UNESCO commission, and of course then the UNESCO commissioners meet up and talk about various things. How centrally within UNESCO it works, within the Earth Sciences division you know how it actually all comes together and gets presented as sort of ooh actually we've got this Global Geopark Network that we administer from Paris guys, I don't know if anybody knows it within UNESCO that there is this thing and how that actually raises the profile within UNESCO itself I'm not sure, but if a geopark wants to be a WHS fine but it needs to prove itself you know to be of that standard. But that's a different concept altogether you know it is very different.

JK Have you seen it close up, have you done any apart from playing them at cricket have you learnt anything further about the Jurassic Coast and what they do and don't

J Well no, I just look at them and know they've been going for ten years now. I think ten years ago everybody thought why do we want to be a WHS and now that everybody's property prices have gone up along the Jurassic Coast, they're all as happy as larry. You know its done wonders for the region so therefore its fantastic.

Yeah and that's what's happening you know. And people are living in that WHS along that coast its really good for the, it is work its bringing people in

JK Is it a coherent body?

J Yeah I think its pretty good now…

JK Have you say its helped, has it been inadvertently or do they have a bit of a commercial sense as well?

J Err I think they've worked hard commercially to, well I mean the fossil festival is their single biggest public event they do, which brings everybody, you know it brings the BBC live TV down, it brings fossil collectors from around the world, it brings everything. There is so much focus there, that Natural England go there, the Natural History Museum go there, they're all there you know doing their bit and what are they doing? Selling fossils and minerals. And yet that's a fantastic event and that's what we could do here you know with a similar event, we could piggyback alongside that, we could be a part of that..

JK And as you say coastal areas have their own specificity as well, by natural erosion processes. Constantly when there's a massive fossil find its when the cliffs have collapsed after a big storm and it exposes something new. And obviously you don't get that inland where things are covered in trees and those processes with different types of erosion, a lot slower and..

J Yeah right so its, you know and I think its very difficult to you know if you're running an organization your not going to want to, you know that you ought to be addressing it but why you're going to convince yourself that you're going to stick to the rules. They are good rules, 'no retailing in a geopark unless..lets no complicate things by opening that up it's a can of worms'. So lets just leave it the way it is, its working at the moment so lets not change, lets not rock the boat. But its not like that. I'm sure if you had a secret poll within the coordination committee group, 'who agrees with this?' I don't think there'd be a majority in favour of that decision.

JK In due course, that'll run its time. That will evolve.

J I think it sort of dawned on everybody that what we've created with sort of the geopark network, very fluid, two representatives, from each network meeting up regularly you know controlling our own destiny, having our owns rules, setting our own rules about revalidation, you Known very nice, very fluid, very transparent and very dynamic. If you, if the network becomes a programme of UNESCO instantly you loose all that and it suddenly becomes embedded within the country, the UNESCO commission, the High Commissioner for UNESCO in the UK ends up being responsible for geoparks. So that it becomes very political and suddenly you've lost all that excitement. And I think that dawned on plenty of people that this was perhaps not what the geoparks want it to become, they do not want to become a programme of UNESCO. However, there's no doubt that the UNESCO label is hugely important to being a geopark and in fact when we first became a geopark it was only to be said it's a 'UNESCO Geopark', it was ooh well that's worth doing it. You know so I think that was important. Now then they went through this sort of faffing around well you can't be a UNESCO Geopark because there is no such thing, its actually you are the English Riviera Global Geopark, 'is endorsed, is acknowledged, is under the auspices of UNESCO'

JK You get tongue tied don't you

J But UNESCO does not have a global network of geoparks, but it does recognize the English Riviera global geopark as a geopark. So therefore what can I call myself, a UNESCO Geopark? No you can't you are…and that debate is coming up I think in October at the next, in Paris at the next massive UNESCO get together. They have a big I think its every year where all the member countries come together. And for the last year of so Patrick has been trying, and all I think a lot of the countries, driven by Uruguay for some extraordinary reason in South America, where they've been lobbying to get an agenda item on the international conference of UNESCO in October, and I don't know what it reads, but its something along the lines of you know of what is UNESCO's position on geoparks, with the ambition that the outcome from this is that at the top level, board level within UNESCO they'd decide that actually a geopark can call itself a UNESCO geopark.

JK Without being a programme?

J Without being a programme, but the ambition is that they stay as they are, they run as they are but maybe with a bit more input from UNESCO, but its all run as it is, but you can call yourself yes we accept that there is such a thing as a UNESCO Global Geopark. And that would just transform it I think. Everybody would start to want to be a geopark then. So that's the current thinking at the moment and we'll know in October I understand.

English Riviera interview (2011b)

Interview with Peter in English Riviera Geopark management team August, 2011

J Did you get a successor to Emma's post? Was it Emma the person who had a two year contract?

P Emily, no we didn't manage to find funding to keep that post going but she was subsequently taken back on by the trust at the Seashore Centre under another seasonal funding pot, so we haven't lost her. She's still there

J And doing this educational link thing?

P Well what's happened more is that the Trust has taken on all of geopark education. So all of the activities that she did have now been widened out to all trust staff. So that anyone can do any of the activities. Its all written up and ready and they can go. And each of the sites have always been working in their own right anyway. Berry Head has always been doing its own activities and geology related stuff and its all so integrated that its been easy for the trust to take that on. Ideally in the future I'd like to have a pure geopark education person who can just be around definitely to do shows and fairs and presentations

J Particularly around geoparks week as well I suppose

P You know just those sorts of who's going to do it – you know just to save those sorts of situation. You know there's just one person that's responsible. Oh it's the Totnes show we need someone to go off there that would be so and so's job. That's a sort of vision I'd like to get. Someone back to do that. You know we're covered we do it all and its all integrated at the moment. It's just a bit more of a faff to arrange at the moment. Oh we've formed our scientific panel of experts

J What's that?

P Well we saw a weakness, so decided to pull together this panel of experts who can support me and also be a really strong link out in to the academic world and help promote us and I suppose effectively help us review research proposals, suggest new research that needs to be done, and we have contacted a load of people. Had a brilliant response. I mean some of them were the people we'd already got, I mean Ian (Stewart) because he's our patron, and the Natural England bloke Jonathan, Elaine Burte she's our BGS local rep, Adrian's the geoparks rep, Chris Procter is a local guy, incredibly knowledgeable on all the local stuff

J So are those round table meetings, how does it work?

P Yeah what we intend to do, they've agreed to do it – we've not had a meeting yet, but I'm drawing up a terms of reference and how often its going to work and what I hope to do is get sponsorship for the group to meet at least once a year.

J Will it always be down here (Torbay) ?

P I suppose if we can get a place that is central for all of these guys , coz I want to make it easy as possible for them. It would be nice to have it down here and show off what we're doing and get them actually together in the environment so

they can get enthused. But not necessarily. Maybe if we struggle getting funding one year it will just be an email correspondence network.

J Are you hoping to actually generate your own papers specifically to do with the geopark?

P Yep that I'm sure will come out of this group definitely. I mean this was done very much to support the revalidation - absolutely, because we saw the weakness and we saw that we've got to do something and it may well be that the EGN still comes back to us and says 'you don't have an employed geologist', they might

J Mmm especially as you were judged by two geologists

P Yeah they might I mean they saw the strength of this panel, but it could still come back to us and they could still issue the yellow card.

J Just sticking with the way the panel works, you say that came from your own viewing of your self-appraisal, did you find that the types of questions and ways in which they were attempting to assess the geopark. Do you think they were fair ways in which to assess the geopark? Or were there gaps?

P A couple were a bit nebulous and they didn't really fit our model, so it was really hard to answer them. I'm just trying to think of any particular ones. Off the top of my head I can't remember, but there was definitely some questions that we sat thinking how the hell are we going to answer that? Coz it just doesn't apply to us

J Now being able to look back a bit on the self-appraisal thing, do you find that what you drew together and what you had to present to talk about for that document, does it generally reflect your sort of day to day activities? It wasn't just sitting outside was a task you had to deal with and then you got back to your different tasks

P It was a really useful process. I have to admit it - because normally day to day you're getting on, you're dealing with one issue to another and you kind of do it on automatic pilot. You never sit back and sort of work out how it all fits together. And how people have been integrated and fit together and how much you've achieved. To actually physically stop everything and go through that form question by question was incredibly useful. Really was and to justify our position locally

J Yes and so you say apart from a few things that you've described, generally it was a nice fit.

P Yeah I felt it worked pretty well. There was a strong focus on an integrated approach, which geoparks have always had. But I seem to remember that the form back in 2007 didn't have so much of that integrated approach. Of linking geology with history and heritage and culture. But this new form, I mean they've changed it several times, but this new form I think it worked really well from that point of view, and it really enabled you to show how you were integrating stuff and what you were doing to integrate stuff, which I thought was really positive. I mean the thing is that it has possibly changed slightly again as they've put it in to a MS Excel document – that's now online on the EGN website, and we'd just got to the point that it was uploaded just as we'd finished filling out the old form

J So it would have been a little bit more convenient?

P I mean a little bit, but its only minimal, its only a matter of getting a calculator out and adding a few pages of numbers up together

J So is it a situation where , are the EGN meeting at least once a year are they reappraising those forms? Is that a part of the discussion?

P Yeah, there's I think…

J Obviously with an expanding EGN

P Yeah it's a constant review, a constant review of how things are working out and whether the forms are working . I mean from memory every EGN meeting I've been to there's been a section on reviewing the revalidation forms and questioning certain bits and making changes to make sure that it works properly

J And do you find there is a spread of people inputting into that discussion, or are there particular people driving and with an interest in that? Do you think its something that everybody is thinking about or is it just an interest group or whatever?

P I think obviously the advisory group focus on it, and then bring it to the CC meeting , but I think its something that's in everybody's interest to get right. Because it's a hell of a process and its really time consuming and you've really got to focus on it, and the easier that we can make it for all geoparks to get through the process – I mean in a fair and proper manner – but if we can tweak it to a point where there aren't those questions that make you go 'what the hell, that question has already been asked in that section so many pages before, why am I having to explain this again' have I misunderstood the question because I'm just about to write the same thing that I put a few pages before. Yes so we had to send the self-evaluation off to the two evaluators 3 weeks before to give them a chance to look at it. We had to send an itinerary that they had to approve, only a rough itinerary, which of course they didn't have any problems with but we had to stay flexible for the whole time of the visit. If they thought we were missing something, or if they wanted to stop longer at a site that we'd scheduled, or if they wanted to see something different, then we had to be completely flexible and open to that

J Did you find was it of use to get the geopark management group more aware of the interconnectedness and wholeness, Or do you think it served or helped people to understand your model?

P I think it served to spread out and it brought the geopark management group closer together, because there was this very strong target to work towards. You know when all of those things that might have been put on the back burner, 'oh we'll do it when we've finished so and so', it helped focus people's minds and you get stuff done that you've been asking for and begging for and like the sign (Motorway brown heritage sign 'you are entering the ERG') you know it was stuff we should have had [previously].

J Do you think that sort of feedback goes back in to the EGN as well, those sort of comments, because that's

P You know I'm not so sure about that? I don't know

J Because that demonstrates, because from the outside the revalidation seems such an onerous task, but if its helps in a strategic way then that's fine

P Well it certainly highlighted to me areas that we were not so strong on, and things that we had to do something about. Absolutely focused my mind and because that was the priority we could concentrate on it. You know everything else got shelved for a bit and it was a case of ticking off the things one by one to make sure we were absolutely on spec for it

J Was it about the revalidation process? Or the website?

P No can't remember…

J So within your management group you kinda have meetings to get together to ensure

P Absolutely

J Coz obviously a lot of the answers would have been at your fingertips but some might not have been

P Yeah, a lot of it wasn't. I would say that we had about six months preparation for this. A lot of management group meetings, very much focused. I'd say I'd done the bulk of the forms and then I'd go to the group with my questions and say OK I need you to do this and I need you to do that, to pull everything together. But yeah it's a long old process, it's certainly not something you can leave to the last minute – not in a month of Sundays.

J Has anything changed down at Hope's Nose in terms of visibility and interpretation? Or are you not allowed to touch it as its SSSI?

P There's an interpretation panel that's been at the top (entrance point) for a long time. We've worked on a downloadable geological trail, which was all systems go. We had six written by a volunteer and we got a designer – this was another project we were working on with the SW walks team. They were supposed to be doing the design work for me, urm but then they sent it to me and their idea of design work wasn't my idea of design work

J Not

P Urm not at all, which put me in a very difficult position just before the revalidation. So I had to beg, steal and borrow some funds to get 3 of them done with a local designer, and then of course with the formation of the panel (scientific) Malcolm decided that he needed to have an overview of what these geological trails said, even though Sarah is a local expert in her own right. Which is fair enough. Classic problem between the two geologists, all sorts..and it kicked off again big time. But now we're at a point where we haven't published them yet. They will go on the website soon

J So what will they look like. Is it something a bit like the brochures?

P I'll show you (fumbles around), we kept them very simple. So just double sided, very simple map with points to stop at, directions on one side to get you from point to point and over the back at each point a bit of information about what you're seeing – maybe a photo. So very very simple, but an added layer of information. So that if someone's got the guidebook, they've read a little bit about Hope's Nose, they've thought ooh that's interesting a want to know a bit more…downloadable, free, easy..

J So rather than static interpretation its something…

P So in time we might get this on to something like an iPhone, you know have it as an app something like that. But that's going to be a little way off I think

J So those 3 maps aren't out yet?

P There's 6 altogether, no they're not published yet – I've got to get them through the scientific panel and then find some more money to go back to the designer to tweak the 3 that he'd done and to create the other 3.

J And then you say it would be left to people to download them themselves, or are there going to be some printed off ones?

P No, they'll just be purely downloadable. Obviously the geopark sites, if they want to print them off and make them available..so if Berry Head want to make them available they can quite easily print a few off and have them available for people to pick up for free. Same with the Seashore Centre because there's one (trail) at Saltern Cove, and there's one that runs from Kents Cavern around Hopes Nose. I'm just trying to think where the other ones are..there's one at Babbacombe, and then we've got two built heritage ones; one in Torquay and one in Paignton…

J Heritage walks?

P So picking up the geology and the buildings and the history of the town type stuff. Yeah so just another layer. And I've, just before I went off sick I was contacted by GA and they want to write a field guide for us, revamp the old field guide for the geology. So that will be an even more in depth up to date

J And finding new ways of language and interpretation

P The play area in Paignton is going to be so fundamental to raise our awareness. Absolutely key site, you know introductory panel of what the geopark is, links all over the place as to what's where. so prime seafront location. Pub at the end. Main entrance is here. Devonian area has specialised rockers and swingers with trilobites and goniatites and things like that on it. Coral shaped trampoline. Standard swings and things for toddlers. But you've got to introduce, mix and match. That's what I was saying with the problems with the company. That's our mountain building, Carboniferous Variscan mountainous climbing net. Urm they've got the faulting wrong on the design, but I'll rectify that. So again once the kids are up there they'll look down and see the massive fault line underneath them.

Permian area – mostly sand with some burrowing type activities. But a water rhyll to represent our flash floods. So the kids press the button at the top the water spurts out. They can dam it, they can put sand in, they can put rocks in, they can do

whatever they want. And experiment with the concept of Wadi type flash flood on a very small scale.

Marble Arch Caves interview (2017a)

Interview with Brendan in MAC management team

J So full-time staff across the geopark how many are there?

B Well here, everyone you see [this morning] based here at the caves there's 7 full-time staff. But there's Sean who is caves supervisor and then 2 senior guides, and then Geraldine who is admin but she's primarily involved with the caves and the money side of things and a bit of the geopark. And then within the geopark there's Richard and then there's the geoparks supervisor who is Simon at the moment. Both of us are very new to those roles. And then there's Darren who is the geopark ranger. Who would be actually physically putting in the fences.

J Right so there's much lower number of staff on the Cavan side?

B Yeah, absolutely and they've no one on the ground. We have Darren and Simon who do all the practical work. And then we have seasonal staff as well. So we get 4 seasonal rangers in to do that work, but Cavan don't have that.

J Are those seasonal posts funded by Fermanagh council?

B Yep by Fermanagh council – so we get 4 of those and then we have a big team of guides. So we'd pull them in sometimes if there's something big going on and a lot of work needed on building.

J Is that are they mostly students?

B Yeah, the majority are students but there's some retired people as well. And then we would get people like myself, I came in as a seasonal guide after finishing Uni. Who want the environmental experience and can't get full-time work. We have a number of people like that who are great because we really pull on people like that with their knowledge and experience and their interest. And they are the sort of people we'd want to usually do the events and the education type of things because they've got that extra knowledge and extra interest that's really important thing. *So there is a big team, but the majority are focused on delivering the tourist attraction*. And then what is expected of the geopark management - there's a very small team We've really been pulling on Shirley and that sort of thing. And its interesting and I've learnt a lot in a very short period of time. And its great but it is overwhelming with the amount, and as Shirley said there's certain projects and certain aspects that we'd like to give a bit more time to, but you just have to prioritise and say I don't physically have the time to do this or that sort of thing. But as Shirley said there's so much potential for this area and there's so many ideas and sometimes we'd be talking and you'd go off and with all these grand plans. But we just don't have the resources to deliver them. So it will be interesting to see what comes out of the governance review and hopefully exciting because we'd like to continue to develop. Its good fun but things like the education side of things we don't have enough time to develop those. But that's something we definitely need to look at and something that there's so much potential, like we've got so many natural resources waiting to be used for that.

J Do you still have a seasonal structure – clearly the caves are open March to end of October, and then during the winter season the focus is more on the educational side, is that still the case?

B No, educational would be mostly seasonal because we need the seasonal [students] staff to deliver the programmes. Over the winter we'd mostly be trying to develop the educational programmes we'd look at it over the winter, and sort of thing and events. I mean we do do some bits and pieces and before it opened we were involved in the Northern Ireland science festival. Which was great. And that was before the caves opened for the season, but we were able to get a couple of seasonal staff in early to help with that. But that's one of the problems we don't have the staff, we're down to a skeleton staff over winter. So that's when we're really looking at the project work and the funding and looking to see what we're going to do geopark wise. What sites we are going to develop, and just the general maintenance, because it takes time to go out and check the sites and maintain the sites. So to maintain the furniture and maintain the monitoring the habitats on Cuilcagh and that sort of thing, so that takes up a lot of our time. It's a favourite question, what do you do over winter and that sort of thing.

J Yeh, is it all nice and quiet because you don't have all the tourists

B We were just saying like people must think we just do nothing – as we're only just opening for the weekend [heritage weekend] as it's a mess and you'd think we'd been doing nothing over the winter, but…

J So it's open as a café and visitor centre but just at the weekend?

B No, sorry we were officially opening on the 13th March, but we are open this weekend Fermanagh Lakeland tourism operate the initiative Fermanagh is open for the season. So we're running free tours on Saturday and Sunday. Its getting busier, we have a lot more people coming to us over the winter, coming to the visitor centre and they ring the doorbell – and we're here because we'll be here Monday to Friday but the visitor centre is locked its not open

J Not at the weekend ? or even Monday to Friday ?

B Not when we're here because we're in the offices there's no one out staffing the front desk. But there's talk now with the boardwark being open on Cuilcagh the numbers have just exploded. The numbers on Cuilcagh.

J Oh, so people see that route's open and they image oh we can drop by to the visitor centre.

B Yes, and even to use the facilities so there's talk now of opening the visitor centre all the year round or at least extending the season. Which we have done each year like for the past 4 to 5 years the season's got a little bit longer. So we were originally it was April to September and now we're creeping a bit earlier in March every year, and its open until the end of October now.

J Is that also the caves or just the visitor centre? Because was that not related to water levels in the system ?

B Yeah it is related to the water levels but also the numbers of footfall, we wouldn't have had the numbers to be viable before. But now we're getting serious numbers of people. I mean last weekend we were running before the science festival on Saturday and so we had to open the building for health and safety reasons. We had to have somebody in the building whilst we were out up on the mountain and someone was looking after the caves part of it. And the girls were flat out from people coming in there looking for tours. Its great that there's an increase in numbers and especially outside of the season. Whereas Fermanagh previously would have just been in July-August that people would come. And it is definitely increasing, and with the boardwalk we put up in 2014 that numbers have just exploded. Which is causing us problems, but its great for numbers and getting people out and enjoying the environment that they wouldn't have before or you're getting a lot of people who're not hill walkers using it. Which is causing problems on one hand and its great on the other hand that you're getting people out and enjoying the environment and seeing something completely different that they wouldn't normally see

J Is that open all year round?

B Yeah, it is.

J So if you got a metre of snow its still open on the top?

B Yes well that was we closed it during the snow and its something we are discussing at the moment. Do we close it every time there's snow or when we're not here at the weekends? Someone is going to have to come in and put up a sign and you've got to put it on the website and Facebook – so we had to over the winter, but its something we're talking about at the moment. Because there's snow right now. So were like do we close it or not. Also if you close it and put up a picture of Cuilcagh in the snow on Facebook then people want to go. So its one of the numerous issues we're tackling currently. So there is talk of opening it year round, but we will need more resources and we can't do it on the staff that we have at the moment. So that's what I've been dealing with since I took over. And its difficult and even the change of staff – so my position hasn't been filled yet which is leaving Sean short in the cave at the busiest time.

J You need extra hands?

B Yeah hands and hands means money that's the problem. But I think as Shirley said, the council or certain people in the council are starting to sit up and take notice and realise and with this publicity from the boardwalk that we're getting and problems that are arising from it, they are realising that we do need help and we need the backing. But previously we were out of the way out of sight, out of mind and the council just let us get on with it and we were grand. But now with the new it's a lot more stringent with all the policies and procedures in place.

J When did the new council structure emerge?

B April 2015. So its still settling.

J It's a big change isn't it?

B Yeah it is. It is – we were as there is only one geopark in the county there's no geopark in Omagh.

J How are the offices divided? Are there two centres?

B Yeah there is, so Omagh has one of them and Fermanagh another. But that will change. There's been talk of developing this recreation centre in Irvinestown in-between Fermanagh and Omagh. There been talk about developing that and I think that they're not going to move everyone's offices but developments more of a central for meetings and all that sort of thing. But there is movement with offices. But thankfully we don't have to worry about that . We've definitely struggled but we haven't been subject to the brunt of everything because we hide away up a mountain. No contact. Email and internet is frequently down, land lines have been causing us problems and no mobile reception.

J Even on top of the mountain?

B In some areas you can get reception. Here we're in a black spot.

J Is that changing ? no idea of putting repeaters up?

B There's no talk of it at the moment.

J Thinking of the bigger projects, the railway between Sligo and Enniskillen there was talk of having cycleway or pathway do you know anything?

B No I've only heard talk of it but I don't think its actually emerged yet. I don't think it is. I heard that it isn't going to go. I don't know.

J The reason I mentioned it is because a businessperson I was talking to in Blacklion had heard about it and heard that it would be potentially a good thing for Blacklion as it would sweep through the village.

B Yeah it would be great and that is something of an axis with greenways and stuff, and I know there's big initiatives going on further North with the Greenways…

J Further North in the geopark?

B No in Northern Ireland up around Belfast its all been developed and that's being extended further. So that's ongoing and hopefully it will come as far as us. Its definitely something that would be a good addition to Fermanagh. There is the fisher trail but its not maintained in any way.

J So its really the aspect of linking up the sites because you can see your dots around but its joining them

B Yeah we were trying to link the Burren to here. So obviously there is the road route but then the signage is non-existent from here to the Burren.

J You have to drive to Blacklion and then up ?

B Yeah that's the way, we were talking about maybe developing this cycle route with signage and that, there had been talk but its not looking good because of land rights issues but developing a cycle route between here and Burren.

J In that case is the farmers ?

B Ahum

J So when it comes to bigger land owners like the Forestry there's no issues?
B No there's no issues there. Ourselves Fermanagh and Omagh have very good relationship the forestry service in the North and Cavan have very good relationship with Coillte. They wouldn't be the problem it the farmers and I think with the boardwalk and the influx of numbers, its putting people off they don't want people tresspassing through their land and litter and all the rest. But we're looking at a couple of options. They are being put on the back burner.

J I'd like to go up to the boardwalk after this. What's the easiest way for me to get up there.

B I'll see if somebody is free they could drive you up. Because it is a good walk. And it looks pretty bleak out there at the moment. If you give me a minute I'll see if there's a vehicle free. I'll check with Sean and see. He might even be going up to check the route.

ENDS

Marble Arch Caves interview (2017b)

Interview with Shirley in MAC management team

J Picking up on this issue regarding signage that we were discussing, can you explain how significant you see this?

S And we hadn't had a full-blown review, but Cavan county council as the roads authority for county Cavan, can take care for whatever signs it wants. We have a wee signage strategy if you want to put up things for the geopark. But we have to go to road services and they're pretty inflexible. Through national guidelines they say you can only have a brown sign up to 10 miles or whatever it is from a site. And you can't put up a sign that is any way advertorial

J Showing preference to one site or another?

S Yeah so those are the sort of issues that crop up – so part of what this governance review will took at for instance is recommendations as to how we can get these agencies on side. You know because I don't think the same issues happen in terms of the Giant's Causeway UNESCO WHS. You see there seems to be a national game plan for helping to develop that, but there isn't one for the Marble Arch Caves UNESCO global geopark. Even though the world heritage and geoparks are the same pecking order as far as UNESCO is concerned.

J The people who put things in to action?

S Yes, and so the problems we have for buy in at national level on both sides of the border as to what the forward plan for the geopark might be in terms of central support they will give. You know it wouldn't cost government very much to say we'll have a similar signage policy for the geopark as for the Causeway coast

J That would be the sort of jurisdictional differences, different bureaucracies and whatever, different responsibilities

S Yeah, so you have to take those things in to account as well. But generally I think we at the operational level we're pulling together pretty well and we meet regularly.

J Do you meet in a central place or do you?

S We move around. Sometimes we have the meetings to be seen to be having the meetings! If you see what I mean. So as people can see us having the meeting. So we have them in a different venue where we know people would be looking saying "who are they, oh that's the geopark management team all right". So that's useful. We may have a meeting in the theatre or in the local community centre or whenever it is you know. A library or any place like that. Sometimes even in the pub. In a meeting room in a pub [laughs]. And I think that's a good thing to do, rather than us working behind closed doors…

J In a council sort of way…

S Yeah yeah, and we have a cross-border events programme as well, so that indivisible so its full of events that are full in Cavan and in Fermanagh. So we're not publishing one for Cavan and one for Fermanagh. So people are picking that up even if they're not interested in going to an event in Fermanagh when they inevitably see "oh there's an event in Fermanagh so this a cross-border entity" so its keep plugging those issues home with people and keeping that realisation going. So that works very well at the geopark management team level. I have to say we haven't achieved the same level of integration at the senior management level. And I suppose that's inevitable because the geopark management team is essentially focused on the geopark whilst the senior management of both councils has a huge raft of other things to think about. So the geopark is only one of those and if the geoparks moving along well and there are no apparent problems then its relatively seamless. It puts it even less high on their priorities if you like. They say that's working well and we don't have to do very much. So that's a bit of frustration because it means that you can't get a unified hearing in terms of the issues that we do have. So one of the issues that we definitely have is that we're chronically under resourced in terms of staff. You know, I could think of another four probably professional level posts that the geopark needs. So that was one of the reasons that I pushed for this review as one of the things that it's going to comment on is the present staffing structure within the geopark and even the present rates set up – there are a range of options open to us at this stage, we can you know from one extreme to the other we could say "ok guys you've done enough with this geopark we don't really want to do any more so we just pack it in and split up and go our separate ways" and that's not going to happen but that's one polar end. The other one is you might say we put it out to private enterprise. And the two councils will walk away. So they say who wants to buy this geopark as a going concern? So somewhere in the middle you could perhaps see that some form of unified trust be set up on a cross-border basis and with councils putting resources in to that. But essentially its a semi-independent body. A bit like a national park authority.

J So it could apply for instance – is this one of the challenges as you said the senior management can be at a bit of arms length and you maybe have to remind them and re-emphasise the benefits and so on? So it would allow a greater degree of independence – imagine a trust structure ?

S Well it is within the realms, there are some precedents locally, Fermanagh district council used to be the tourism marketing body for Fermanagh. It set that up because it identified a gap…

J Is that Fermanagh lakelands?

S Yes, Fermanagh lakelands tourism yeah, so about 20 years ago that was hived off from being a council function, so the councils tourism officer became the manager of Fermanagh Lakeland tourism (FLT) with a team of staff and reporting to a board. The level of financial input the council was already putting in to tourism in Fermanagh was maintained and has been inflation proofed essentially since. And topped up as need be, but what that also allowed happen was the private sector tourism providers could join FLT as members and pay contributions so in effect the coffers were essentially doubled, because the councils funding was seen as 50% and the private sector as 50% more or less and that allows them to apply for external funding that they may not have been able to get as a council entity. The

other option would be how do we more closely integrate what's going on in the geopark between the two counties and there the model might be the North Pennines AONB. Where you have 3 English county councils come together to run the AONB which is the same boundaries as the geopark, but the geopark team are the AONB team as employed by one of the councils, Durham county council. Each council puts in its financial subventions and the manager he reports to his board or his advisory group or whatever you call it, it's effectively a board. So there are different models basically. Or we continue the way we are but we sort of clarify roles a bit more. Give better terms of reference, because we really don't have terms of reference for the staff working together. We more or less have to agree those between ourselves.

J So it's more informal?

S Yes, so there's various things and all that needs to be thrashed out. And that's not to say that we've not had a lot of success we have. You know I think what we're all looking at now is we've come a long way but we can see that there's much more that we can be doing. And there's a lot of potential still unlocked in this geopark and how do you best do that? Because I mean the geopark is here for the benefit of the local people all of the rest comes along with that, but I mean the sense that we want to be creating jobs, helping people to earn a few more quid, giving them a better opportunity or better lifestyle opportunity – it all sounds a bit pretentious but that's the reality

J No no, its also kind of what councils might be interested in you'd hope?

S Yeah, it's the sort of service level you might expect you might put on in terms of council speak.

J So in terms of policies, is it written down here we need to do this and this, does such a policy document exist in either Fermanagh or Cavan? Like what is the rationale for having a geopark? Or is it actually the geopark creating this policy what you've just described?

S Yeah the geopark sort of creating it. You have to remember that Marble Arch Caves and Culcaigh mountain park as a joint entity as it where pre-existed geoparks and we were the first geopark in the UK, one of the first 8 anywhere and we were quite elementary towards helping to develop the whole geopark ethos and procedures and so on. So that was good from our point of view, but I sometimes look back at some of the newer geoparks that have been specifically to become global geoparks with a bit of envy. We've done a bit and then we've decided another bit, and we've taken advantage of opportunities and stuff. Whereas if we'd just said here look this global geopark caper seems a good idea, how's about setting up a geopark in our patch and getting that UNESCO status. And then we look at all the criteria of geoparks, all the things geoparks should be doing and we would have set out a plan to achieve all that. Whereas some was what we were already doing you know, so its been ad hoc to some extent. At the end of the day if you're embroiled in a well thought out and well structured strategic plan it opens other doors for you. And that's one of the things we are hoping will come out of this review as well – and a strategic plan is a good starting point for that type of thing. Because it was too much locked up in people's heads and so there's all those aspects.

J What a juggling act it all is. Geoparks is really keeping so many different diverse balls up in the air.

S Yeah, I wouldn't argue with that really No and it can be frustrating at time too. Because you know that there's things that you should be devoting a lot more time to and that – but that's a resourcing issue then.

J In terms of funding programmes and streams, how significant have EU funds more widely and then EU peace dividend funds specifically, how much emphasis is there on this?

S We've done well out of European funding in the last few years, and we've mainly focused on INTERREG route in the Irish border region for no other reason than the fact that the two Northern Ireland and the Irish governments have made up the European funding. Which was 75% I think from Europe, so the two governments made up the 25%, so its effectively 100% funding [for the recipient project]. Compared to some other European streams, for instance we've gone for another INTERREG stream on a Pan-European basis we'd probably get only 50% and have to find the other 50% ourselves. So we concentrate to some extent on the cross-border Irish border regions stuff. We've had two major projects from that in the last 6 or 7 years, and that's been significant. Those are both finished now. But that's now due just a lot of development, infrastructure type of thing, interpretation and stuff like that.

J Partially on that theme, with the change in council boundaries and you're now Fermanagh & Omagh, how much if at all has that changed the situation?

S Well it has. That's taken up a lot of attention at the senior management level in terms of getting the new council up and running. Because you've basically amalgamate two former district council areas in to one. There was a big hiatus of staff interchange and staff leaving. A lot of people had to, people whose jobs were directly effected are being duplicated if you like, in many cases they've had to apply for their own jobs. Sometimes in competition with a colleague from the other council that had already been doing it [the same task]. Plus people from outside wanting to come in. That has been a big distraction in F & O district council, and still is. It also meant that we inherited other councillors from Omagh district council who had no allegiance or affiliation to things like the geopark. You know, so for instance the councils the leisure centres, the recreation centres that both councils operated have all been absorbed in to the recreation department of the council. So councillors can see that. Now instead of having one big leisure centre in Omagh, we have two. We have a big leisure centre in Omagh and another in Enniskillen, and we have a smaller ones around other towns. They all have to be managed and funded together. And things like the geopark we're really…"oh what are we going to do with the geopark, let's stick that in to arts, culture and leisure". Because tourism for instance in the council, when we had fallen under it [that dept] beforehand, has been split in two. We now have a department that looks at tourism development, and then hidden in another department is the management of existing tourism provision. Which they're maybe good reasons for that but they escape me to some extent. And then people at senior level, at director level have been given extra, new or different responsibilities, some of which they have no real background in either. Some they have, so elements of their remits they are quite expert in and others are new to them. So its been a bit messy. It's settling down a

bit now – and on top of that there's been a huge raft of new procedures and policies dumped on everybody's lap as well. Not all necessarily imposed by the council. Some are imposed by the government. So it's been a very messy time and its not really the time to start saying we don't want to lose sight of this, that and the other in the process.

J Which is an incredible full time task isn't it?

S Yeah yeah, and within government you see, government departments have all been rejigged as well as part, almost in parallel to this. The department of agriculture has changed quite drastically, its absorbed the environment service for instance and stuff like that, so they're…

J In the North [jurisdiction] ?

S Yeah, its now the department of Agriculture, Environment and Rural Affairs or something isn't it?

J So its more in line with DEFRA ?

S Yeah DEFRA's a bit like that yeah. Some of our stakeholder organisations have changed fairly drastically, so its all in a state of change and then of course the whole situation that's on in Northern Ireland at the moment with government effectively dissolved with the elections today. Its not been a handy time to be saying to people "we won't being doing this so what are you going to do for us?" It's the least of our problems. You have to fight your own corner. But given the Irish context, that could be happening every day of the week, every week of the year for the next 30 or 40 [tongue in cheek] or something similar cropping up [laughs] urm and then people don't always get the global geopark idea. Its not the easiest concept to explain. I think it's a very good concept and it has a lot going for it. But it's not something you can explain in 5 minutes. You know you could say with World Heritage, its easier to explain UNESCO, and the people of the world came together to say we're going to make a list of all the special places in the world, and we're going to do our best to look after them. And that's World Heritage. And people can get that. But geoparks is a bit more complex and…

J Living, they're more living…

S Yeah, yeah and so its not easy to get that across. And World Heritage didn't build up its level and it still doesn't to a large element of the population World Heritage is just some nebulous thing they probably couldn't tell you much about it. And they vaguely know it's a good thing if it's a WHS there must be something fairly special about it. It didn't build its reputation up overnight. I mean its 1972 since World Heritage was set up. Geoparks have been around a much lesser time, and only got their formal UNESCO status in 2015. Its less than 18months ago. So it will take time. But we need that to filter down to people like road service engineers. You know our road up here is in poor state [the one leading up from main Sligo road] and we're trying to get pressure on to get that improved and he's saying "that's an unclassified road because its classified depending upon the number of people who live on it". You know about 30 people live on the road.

J How many coaches do you get up here?

S Yeah, I mean that's crazy. It has to be based upon the number of people coming up here. "Ah, but you see that's the rules I'm working under"

J Even the type of traffic. There's probably more coaches going up that road than a huge number of roads.

S Oh yeah yeah, than in some of the villages and stuff. And whereas places like the Giants Causeway there's a whole central plan around that. Signage, roads, maintenance all of that stuff, arterial routes and everything. And of course that's not helped by the fact that our geopark is spread across a big geographical area. This is only one part of it. All that stuff.

J Yep, that's very helpful.

ENDS

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